OVERSEEING THE HEART OF THE ENTERPRISE

The Commission's Thirteenth Annual Report
on Program Projection, Approval, and Review Activities

Agroecology **ANTHROPOLOGY** Astronomy ATMOSPHERIC SCIENCE Biological Sciences **BUSINESS** *Chemistry* **COMPUTER SCIENCE** Entomological Sciences Environmental Health **Geophysics and Space Science** HISTORY Industrial Relations *LANGUAGES AND LITERATURE* **Latin American Literature** LAW Library and Information Studies MATERIALS SCIENCE *Molecular Genetics* **Native American Studies** **NAVAL ARCHITECTURE** Nuclear Engineering NEUROSCIENCE Optometry **Plant and Soil Biology** Political Science *PREFORESTRY* Psycholinguistics **READING SPECIALIST** Scandinavian **Sociology** Statistics *Wildlife and Fisheries Biology*

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

Summary

This is the thirteenth in a series of reports by the California Postsecondary Education Commission reviewing activities of the Commission and California's public colleges and universities between July 1, 1987, and June 30, 1988 in the oversight of academic and occupational programs The report uses the term, "academic program evaluation," to describe the full process of planning future programs, proposing new programs, reviewing existing programs, and discontinuing programs Since these programs constitute the curriculum, the process can be seen as focusing on the very heart of the academic enterprise

This report seeks to serve two purposes (1) to provide the required annual update on Commission and segmental activities in the area of program review, and (2) to create a context for the Commission to consider its program review function in relation to its other priorities and in light of State needs

Part One of the report sets this context through a review of the literature and a description of the Commission's role and function in the process as defined by legislation and through practice The next three sections discuss Commission and segmental activities in the projection of new programs (Part Two), the approval of new programs during 1987-88 (Part Three), and the review of existing programs (Part Four) The report concludes with a look at the evolving role of the Commission in academic program evaluation and recommendations about steps that the Commission should take to clarify and focus that role

The Commission adopted the report at its meeting on September 18, 1989, on the recommendation of its Policy Evaluation Committee Additional copies may be obtained from the Publications Office of the Commission at (916) 324-4991 Questions about the substance of the report may be directed to Joan Sallee of the Commission staff at (916) 322-8011

OVERSEEING THE HEART OF THE ENTERPRISE

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CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
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CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

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1 *An Overview*

IN ESTABLISHING the California Postsecondary Education Commission as the State's planning and coordinating agency for education beyond the high school, California's Legislature recognized the review of academic and occupational programs as one of the Commission's central responsibilities, and it assigned specific program review functions to the agency Shortly after its formation, the Commission requested the staff to prepare an annual report describing its activities related to the review function This is the thirteenth in that series of annual reports, which summarizes the program review and planning activities of the staff and the segments for the period between July 1, 1987 and June 30, 1988

California higher education has clearly changed since these reports began In response to the twentieth century's unremitting knowledge explosion, the curriculum has expanded New programs have been contemplated, proposed, and begun, others have continued to flourish, while some have died The curriculum is truly the life's blood of a campus, and it is the ebb and flow of its courses that animates an institution and shapes its form and character While the curriculum has expanded, student enrollments have also increased, and -- in response -- new campuses are being proposed At the same time that institutions face record numbers of students, the faculty is graying, and the pipeline feeding the candidate pool is dangerously empty Outside the walls of the university, the country struggles to maintain its competitive advantage One cannot look at academic program planning and coordination without being conscious of the interrelationships among these issues

After twelve reports about program review, it would seem only reasonable to pause for some stocktaking Added urgency is lent by the challenges facing higher education today This report will therefore serve two purposes (1) provide the required annual update on Commission and segmental activities in the area of program review, and (2) create a context for the Commission to think about its program review function in relation to other Commission priorities and in light of State needs This part of the report sets this context through a review of the literature and a description of the Commission's role and function in the area of program review The next three sections discuss Commission and segmental activities in the projection of new programs (Part Two), the approval of new programs (Part Three), and the review of existing programs (Part Four) The report concludes with a look at the evolving role of the Commission in program review and recommendations about steps that the Commission should take to clarify and focus that role

What is program review?

These reports have always used the term "program review" to describe the Commission's activities in the area, but staff is now persuaded by the literature that "evaluation" is a more elastic word "that stretches to cover judgments of many kinds" (Weiss 1972, p 1) The term "academic program evaluation" appears to be the broader, encompassing all parts of the organic process being considered here institutions *projecting* future programs, *proposing* new ones, *reviewing* existing programs to determine their continuing viability, and finally, *discontinuing* some programs as they decline Indeed, Seymour (1988) applies the metaphor of the life cycle to academic program evaluation, cautioning that it is important to recognize where in the cycle each program is In reality, however, the lines are sometimes blurred between the stages of the cycle This report will use the more generic "program evaluation" to refer to the whole process, "program approval" for the evaluation of new program proposals, and "program review" when the review of existing programs is discussed, but the lines among these definitions and what they are called will sometimes be necessarily blurred as well, and semantics should not get in the way of discussion

Unlike many areas in higher education today, academic program evaluation has few committed constituents, elicits faint understanding, and compels

little interest In comparison to many other topics, it receives scant notice in the literature Headlines in educational weeklies or the popular press do not reverberate with exhortations to increase it or decrease it There are no organizations devoted to its study, no conferences held to examine its various aspects Viewed often with suspicion from within the academy, it is regarded dimly from without

Yet academic program evaluation comes as close to the very heart of the academic enterprise as any policy-making or administrative function, and it holds the most potential for shaping the present and future of higher education Eugene Craven calls it "an integral part of higher education throughout its history , intrinsic to the process of determining what knowledge is of most worth and how it is to be organized, developed, and communicated" (1980, p xii) In 1663, for example, the Harvard College curriculum included only political philosophy, ethics, astronomy, geometry, physics, Latin, and Greek Today's academic programs will undoubtedly look equally limited three hundred years from now (Seymour, 1988) Through the academic program evaluation that occurs over time, new programs are added, others split, some merge, still others change titles, and occasionally a program is discontinued The curriculum is shaped in a slow evolution which has been called incremental at best and glacial at worst Even that strong champion of higher education, Robert Hutchins, wryly observed that "every advance in education is made over the dead bodies of 10,000 resisting professors" (quoted in Jellema 1986, p 9) Yet anyone who works in the field today knows that new programs can sometimes spring up quickly in response to new areas of inquiry, new technologies, and new needs It is academic program evaluation, done informally or formally, by those both internal and external to the institution, that can help maintain the delicate balance between innovation and tradition, faculty interests and societal need, campus priorities and state accountability, protection of institutional autonomy and ensuring the public trust

Although academic program evaluation only became standard practice from 1950 to 1970 during the last recent growth era of higher education, one can infer that the evaluation of academic programs occurred during the first three centuries of American higher education by the changing admission requirements and curricular content of those colleges and universities Robert Barak, who has written widely on the subject of academic program evaluation, has traced its history through five major developments in American higher education (1) the concept of a "program", (2) the emergence of the accreditation movement, (3) the emergence of the profession of educational evaluation, (4) the rise of the accountability movement, and (5) the development of sophisticated approaches to the management of higher education (1986) His choice of antecedents shows its evolution from a strictly internal process to one shared with external constituencies Today, over three-fourths of the nation's colleges and universities are known to employ some type of program review, most multi-campus systems and state boards became involved in the 1970s.

Just as the actors have changed in the evaluation of academic programs, so has the context in which it is done as well as its practice and procedures In 1982, Barak described a number of trends in academic program evaluation at the system or state level at the time, program approval responsibilities were growing, with final determination shifting out of the hands of the institutions into the state-level postsecondary agencies, the scope of programs under review had broadened, agencies were using multiple criteria, asking more difficult questions, and demanding more exact responses, several states had begun to ask for program-performance measures to monitor programs after initial approval, a number of state agencies encouraged certain kinds of institutional program development while implicitly or explicitly discouraging others, several of them required some form of a "start-one stop-one" approach to new program approval, and more states used a planning approach than an incremental one These trends may be compared to six others which Barak identified in 1986, when he noted that program evaluation was more widespread, more comprehensive, more systematic and formal, more summative than formative in purpose, and more closely tied to other decision-making processes than before He also observed that it had risen to a new level of importance with its various constituencies, primarily because it had become more widely used, effective, and integrated into planning and budgeting processes

Perhaps in response to these trends, almost two-thirds of the policies and procedures used by states in program evaluation have been revised within the

last four to five years Major shifts in policy have occurred in the areas of pre-proposal and post-approval, reallocation, scope, planning, and criteria (Seymour 1988)

Who evaluates programs?

The basic assumption that a major portion of academic program evaluation should be done at the institutional level drives both theory and practice In his article about multi-campus system approaches to academic program evaluation, Donald Smith declares the assumption to be "fundamental both to a proper conception of the nature of a college or university and to the ultimate productivity of program evaluation efforts" (1980, p 45) Academic departments are the most appropriate locus to determine the proper structure and content of a program or curriculum, and campus policy makers can best decide how these programs relate to the institution's mission, function, and role In the case of multi-campus systems, however, someone must evaluate how a proposed program relates to those of other institutions in the system, and some central coordinating or governing agency must judge how a proposed program relates to the programs of other institutions in the state and indeed, to the state as a whole

All states have some form of statewide postsecondary governing, coordinating, or planning agency or board Governing boards possess regulatory powers, while coordinating boards have limited legal responsibilities for institutional management and operation About 10 states, including California, have some sort of advisory planning board Although statutory or constitutional authority clearly varies greatly, higher education agencies in all 50 states conduct state-level review of some sort In the majority of states, state agencies assume the major responsibility for reviewing the programs of public institutions, relying on a combination of outside consultants and agency staff (Barak 1981, p 216, Barak 1982, pp 55-60), and 28 of them have authority to discontinue programs (Conrad and Wilson 1985)

Unlike its counterpart agencies in a growing number of states, the Commission has no authority to conduct reviews of existing programs on individual campuses nor to discontinue programs Rather, to paraphrase its enabling legislation, the Commission has been mandated to review the institutional and systemwide long-range plans of the segments, integrate the planning efforts of the public segments, review proposals for new programs, evaluate the program review processes of the segments, establish a schedule for segmental review of selected educational programs in consultation with the segments, serve as a stimulus to the segments by projecting and identifying societal and educational needs, and undertake such other functions and responsibilities as are compatible with its role as the statewide postsecondary education planning and coordinating agency Accordingly, Commission staff over the years has performed the following functions

1 Reviewed the lists of projected programs submitted annually by the University of California and the California State University and, using a number of criteria, selected those programs requiring future review,

2 Reviewed proposals for new programs identified during the projected program process (since the Chancellor's Office of the California Community Colleges has never submitted a projected programs list, Commission staff has reviewed the proposals for all new programs in that segment), and

3 Examined the annual reports submitted by the University and State University on the review of existing programs occurring on each campus (no report is submitted by the Chancellor's Office of the Community Colleges) and describes this work to the Commission in the annual report

In its advisory capacity, the Commission must rely on the mechanisms in place at the University of California and the California State University for comprehensive and thoughtful evaluation of projected, new, and existing programs The appropriate offices in both four-year segments take their responsibilities very seriously and cooperate fully with Commission staff On the other hand, as noted above, the Chancellor's Office of the California Community Colleges has never produced a plan of projected programs nor submitted a report on the review of existing programs It is also clear from many of the proposals for new programs submitted by the community colleges that they need assistance in complying with the Commission's criteria

Within the last year, however, serious work on program approval and review has begun in the Chancellor's Office The Board of Governors will receive a report on course and program approval at its September meeting, and an advisory committee is being established this fall to discuss when program approval needs to be sought, how more authority for course approval can be delegated to the campuses, and how to strengthen both the program inventory system and the course and program approval procedures in the Chancellor's Office Although extensive field consultation is required before any change can be implemented, it is anticipated that once guidelines are reviewed and revised, a handbook for preparation of new program proposals can be prepared and distributed to the campuses in Summer 1990 Although the projection of programs does not seem imminent for the community colleges, the work currently being done is the most heartening activity undertaken on academic program evaluation in the two-year segment in years, and the Commission strongly supports its progress

Commission staff is guided in its work regarding academic program evaluation by a set of guidelines adopted by the Commission in December 1981 It is also assisted by an Intersegmental Program Review Council (IPRC), currently consisting of the following members

- Calvin C Moore, Associate Vice President of Academic Affairs, Office of the President, University of California,
- Sally Loyd Casanova, Dean, Academic Affairs, Plans, Office of the Chancellor, The California State University,
- Ronnald Farland, Acting Vice Chancellor for Academic Affairs, Chancellor's Office, California Community Colleges, and
- William J Moore, President, Association of Independent California Colleges and Universities

In 1981, consultants Frank Bowen and Lyman Glenny urged the Commission to take greater advantage of the experience and abilities of the Council

> These representatives have a wealth of planning and program review experience that probably cannot be duplicated in any other state, yet our impression is that IPRC meetings are characterized by irregular attendance, desultory discussion, and lack of direction There are numerous issues and questions relevant to statewide program planning and review that would find an appropriate forum in IPRC, even though they may not be identified with an immediate program review issue (pp 71-72)

Although membership on the Intersegmental Program Review Council has changed since the Bowen and Glenny report, the wealth of planning and program review experience mentioned is at least as high There is also strong staff support in each of the segments But the Council has not met regularly, and its potential for discussing academic planning issues with intersegmental implications has not been fully exercised Strengthening the role and function of the Council is a major priority for the coming year, as its full participation is sought in clarifying the Commission's role

Why are programs evaluated?

The primary purpose of academic program evaluation is to maintain and enhance the quality, vitality, and responsiveness not only of programs, departments, and individual institutions, but also of entire systems, and, finally, higher education as a whole Bogue (1980, p 81) describes it as an instrument of renewal in which the base question should be "how can we do a more effective job in facilitating the growth and development of our students?" The question is appropriate for all involved parties to ask -- from individual faculty members to vice presidents for academic affairs to State policy developers and makers The difference lies in the context within which the asker must operate Unlike other states and other times, academic program evaluation in California today only occasionally results in the discontinuance of programs The potential is there, however, for the termination of programs can serve quality as well

Academic program evaluation can also be a tool in long-range planning and budgeting efforts, and perhaps as a subset of the former, can further a state's economic development In practice, however, minimal attention seems to have been paid to this capacity, although numerous researchers have espoused a more systematic linkage (Arns and Poland 1980, Bowen and Glenny 1981, Clifford and Sherman

1983, Craven 1980, Hartmark 1982, Mingle 1988, Patton 1978, Stufflebeam et al, 1971) Donald Smith reports that the formal effort to bring long-range planning considerations into the evaluation of particular academic programs is a "relatively recent and undernourished phenomenon" (1980, p 46) Program evaluation continues to be done most often in isolated chunks rather than as integrated pieces Long-range planning depends upon a synthesis of data, however, so piecemeal program review contributes little to the coordinated institutionwide and statewide perspective necessary to generate change Daniel Seymour muses that "without such comprehensive decision making, the result can be the institutional equivalent of a rocking chair -- much activity but no movement" (1988, p 41)

Program evaluation in general and program review in particular benefit institutions in a number of areas that can contribute to strategic planning they help contribute to overall institutional effectiveness and quality, identify institutional priorities, give faculty, administration, and board of trustees a sense of good stewardship, define institutional mission, assess an institution's competitive advantage, provide guidance for program improvement, determine institutional strengths and weaknesses, provide for institutional accountability, and assist in budgeting and reallocation decisions (Barak 1986)

These contributions need not be institution-specific Rather, if each element -- effectiveness, priorities, mission, strengths, etc -- applies to all institutions intra- and intersegmentally, the connections between program evaluation and long-range planning become rather more clear Braskamp advocates the use of "issues" (salient and important matters that need attention) and "concerns" (matters over which there is disagreement between constituencies), rather than depending heavily on quantitative data, to join evaluation with planning (1982, p 61) However one forges the link, much work remains in the area

Concomitantly, few advances have been made to link program evaluation with statewide economic development, although the connection seems logical and appropriate to make While some university programs like those in computer science or engineering are tied to economic development efforts of the past and Pacific Rim studies align with those of the future, the link is tangential and the efforts to achieve the congruence informal Few universities have created an economic development agenda with clearly stated objectives, let alone tied it to their ongoing process of academic program evaluation The State, in turn, has not examined the role that the universities can play nor earmarked resources to support their efforts (Smith, Drabenstott, and Gibson 1987) Although the development of an institution's curriculum cannot be used solely to further the aims of the State, neither can academic programs exist in a vacuum The community colleges perhaps best respond to the State's economic development needs, yet their program evaluation processes are so poorly developed that there appears to be little coherence between the two At the least, the area invites further discussion and exploration by all the segments

2 *Anticipating Projected Programs*

IF ONE uses Daniel Seymour's metaphor of the life cycle, any report on academic program evaluation activities must begin with the projection of new programs, for it is here that one sees the blueprint for the future -- the curriculum as it may be, not what it is

For the past ten years, the University and State University have submitted to the Commission master lists of programs projected to begin a year or more in the future These lists are prepared by the campuses in response to annual requests from the systemwide offices When the Chancellor's Office of the State University asks campuses to submit their five-year academic plans, they are reminded that in some areas like architecture, computer science, engineering, fine and applied arts, health professions, home economics, and industrial arts and technology, program development is limited or guided by specific policy guidelines that have been adopted over time by the Trustees or recommended by the Chancellor's Office (Appendix A) The Chancellor's Office also encourages campuses to link program planning to campus mission and planning assumptions

Commission staff reviews these lists of projected programs and identifies those that require Commission review Such review is considered warranted for all doctoral programs and any additional programs where there are compelling questions about need, demand, or costs Commission staff may also identify categories of programs that it believes ought to undergo special review Current designations include those fields for which there are few established models, like aviation, gerontology, or graphic communication, and disciplines undergoing public scrutiny or professional review, such as educational administration, physical therapy, and nursing

The complete list of projected programs for both four-year segments is attached as Appendix B Last year's report to the Commission noted that the list of projected programs at that time was longer than any such list during the previous decade, its 178 programs representing a 72 percent increase over the number of programs on the list five years before That report commented that those numbers reflected a climate of expansiveness markedly different from the mood of the early '80s This year's list of programs projected for initiation between 1989-90 and 1994-95 is longer still by 25 programs, maintaining the 12 percent annual increase pointed out last year This year's compilation also includes 31 programs from the State University and 31 from the University appearing on the list for the first time Campuses may be responding at once to increased enrollments, differing student and societal demands, burgeoning faculty interests, and the expansion of knowledge itself As healthy as these symptoms may be for the vitality of higher education, it is well to remember the warning that "the besetting sin of our institutions is their insatiable impulse to expand" (Holt quoted in Seymour 1988, p 33) It is for this reason that campus, systemwide, and statewide review processes are valuable

Past pattern has seen the largest concentration of projected programs in the health professions, the fine and performing arts, engineering, and computer science This year is no exception, with 39 new programs projected in the fine and performing arts, 25 in the health professions, 17 in engineering, and 11 in computer science A healthy proportion of projected programs also exists in business and management (11), education (11), and in the interdisciplinary category (20) as well As each of these fields presents somewhat different challenges when considering the need for new programs, Commission staff proposes to encourage discussion about each area at meetings of the Intersegmental Program Review Council, a review of segmental planning efforts in the fine and performing arts occurred at the Council's meeting in June and will be continued when it meets on September 27 Such discussion can lead to better planning for both the segments and the Commission and may also lead to consensus about the need for intersegmental review of the existing programs in one or more of these areas

Although the purpose, structure, and costs of intersegmental reviews will demand careful consideration, these factors should not *a priori* be considered impediments to undertaking the activity Although admittedly facing a less complex and sizable system of higher education than exists in California, other states are known to have undertaken statewide reviews in education, engineering, nursing, business administration, and general education

The projected programs that raise questions of unnecessary duplication of effort, excessive costs, demand, need, faculty availability, articulation, and the like can also guide the segments in their choice of programs for systemwide review The University of California is currently reviewing three aspects of programming in the arts Ph D s in music, the overall issue of professional degrees in the arts, and a 40-year-old special program that provides supplementary funding for the arts Last year, the University examined linguistics and anthropology programs throughout the system The State University recently reviewed its forestry programs and is currently considering reviews of business, gerontology, and industrial studies/technology, and has requested lottery monies to fund these curriculum studies The State University is also involved in an engineering study to ascertain whether new schools of engineering are needed and feasible The first phase of the study, completed by a consultant in 1988, was a market study examining the supply of and demand for engineering graduates In Phase II of the study, a systemwide committee is advising the Chancellor about the merits of starting new schools of engineering versus the merits of expanding existing schools Key issues being considered include (1) minimum academic and resource requirements for new schools of engineering, (2) the impact of new schools of engineering on existing schools, and (3) the importance of schools of engineering to the overall program of campuses that do not now offer engineering Although no time table has been established for the completion of this study, the Commission supports its progress and timely conclusion, with the hope that the results will shed light on issues in engineering facing all three public segments

There is also the potential to use projected programs in strengthening the approval process of new programs Both the University and State University now submit on an annual basis to the Commission one-page descriptions of their projected programs, along with the aforementioned lists Frank Bowen and Lyman Glenny in their 1981 *Evaluation of Statewide Program Review Procedures* recommended that staff develop an integrated program plan from segmental program plans, with the intent of the recommendation being that the Commission could then examine new and existing programs at a level of generality appropriate to its statewide concerns Discussions of specific program areas with the Intersegmental Program Review Council and intersegmental reviews are both strategies which can enhance this more global planning effort

One of the current purposes of developing lists of projected programs, however, is to identify those that require Commission staff review and those that from a statewide perspective appear to raise no serious questions The list in Display 1 on the next four pages includes projected programs that for reasons of demand, need, cost, or other reason should be reviewed with special care by campuses, systemwide offices, and Commission staff The appearance of a program on this list implies no judgment about its potential, quality, or the ability of a particular campus to offer it Nor does it mean that it is less likely to be endorsed at any level of the review process than a program not on the list Its inclusion is simply to alert program planners to the importance of a careful and comprehensive review of student demand for the program, societal needs, appropriateness to institutional and segmental mission, the number of existing and proposed programs in the field, total costs, its contribution to the maintenance and improvement of quality, and to the advancement of knowledge

Any program not appearing on the list below should be sent to the Commission as an item of information by both the University and the State University

The categories in Display 1 have been reduced by one since last year, and the list no longer includes programs in architecture or Pacific Rim studies The proportion of the total number of programs to be reviewed has also decreased, and Commission staff will try to reduce it still further in the years ahead until it examines new programs at a level of generality appropriate to the Commission's statewide concerns

DISPLAY 1 Projected Programs, 1989-90 Through 1993-94, Requiring Commission Staff Review

Joint Doctoral Programs

Communicative Disorders	Ph D	San Diego State and USC	1990
Educational Leadership	Ed D	UC Systemwide and CSU Fresno	1990
Educational Administration	Ed D	CSU Sacramento and UOP	1990
Geography	Ph D	San Diego State and UCSB	1990
Public Health	Ph D	San Diego State University and UCSD	1989

Doctoral Programs

Health Services and Policy Analysis	Ph D	UC Berkeley	1989
Integrative Biology	M A /Ph D	UC Berkeley	1989
Molecular and Cell Biology	M A /Ph D	UC Berkeley	1989
Plant Biology	M A /Ph D	UC Berkeley	1989
Education	Ed D /Ph D	UC Davis	1991
Epidemiology	M S /Ph D	UC Davis	1989
Food Science	Ph D	UC Davis	1989
Linguistics	Ed D /Ph D	UC Davis	1989
Music	Ph D	UC Davis	1989
Population and Evolutionary Biology	Ph D	UC Davis	1989
Anthropology	Ph D	UC Irvine	1991-92
Criminology and Legal Studies	M A /Ph D	UC Irvine	1990-91
Dramatic Theory and Criticism	Ph D	UC Irvine	1990-91
East Asian Languages and Literatures	Ph D	UC Irvine	1990-91
Educational Administration	Ed D	UC Irvine	1989-90
Environmental Health and Planning	Ph D	UC Irvine	1989-90
Geosciences	M S /Ph D	UC Irvine	1990-91
Health and Clinical Psychology	Ph D	UC Irvine	1990-91
Human Development	Ph D	UC Irvine	1990-91
Human Genetic Disease	Ph D	UC Irvine	1990-91
Sociology	Ph D	UC Irvine	1991-92
Dance	Ph D	UC Los Angeles	1989-1990
Educational Administration	Ed D	UC Los Angeles	Indeterminate
Environmental Health Sciences	M S /Ph D	UC Los Angeles	1989
Epidemiology	M S /Ph D	UC Los Angeles	1989
Health Services	M S /Ph D	UC Los Angeles	1989
Musical Arts	D M A	UC Los Angeles	1990
Computer Science	Ph D	UC Riverside	1990
Dance History	Ph D	UC Riverside	1990
Engineering	M S /Ph D	UC Riverside	1994-95
Art History / Criticism (Visual Arts)	M A /Ph D	UC San Diego	1991
Dramaturgy / Dramatic Literature	Ph D or DFA	UC San Diego	1992
Materials Science	M A /Ph D	UC San Diego	1989
Computer Science	M S /Ph D	UC Santa Barbara	1990
Music	M M /D M A	UC Santa Barbara	1989
Statistics	Ph D	UC Santa Barbara	1990

(continued)

DISPLAY 1 (continued)

Anthropology	M A /Ph D	UC Santa Cruz	1989
Applied Mathematics Board of Studies	M S /Ph D	UC Santa Cruz	1989-90
Economics	Ph D	UC Santa Cruz	1990-91
Environmental Toxicology	M S /Ph D	UC Santa Cruz	1989-90
Marine Sciences	Ph D	UC Santa Cruz	1990-91

Projected programs in fields with many existing and/or proposed programs*

Computer Science/Engineering			
Computer Science	M S	CSU Bakersfield	1990
Computer Science	M S.	CSU Dominguez Hills	1989
Computer Engineering	B S	CSU Fresno	1989
Computer Science	M S	CSU Fresno	1989
Computer Engineering	B S	CSU Fullerton	1991
Computer Science	M S	CSU Los Angeles	1989
Computer Science	M S	CSU San Bernardino	1990
Computer Engineering	M S	San Jose State University	1989
Computer Science	M S	CSU Stanislaus	1992
Computer Science	Ph D	UC Riverside	1990
Computer Science	M S /Ph D	UC Santa Barbara	1990
Engineering			
Ocean Engineering	B S	UC San Diego	1990
Ocean Engineering	M S	UC San Diego	1994
Electronic Engineering	B S	UC Santa Cruz	1990-91
Construction Management	B S	CSU Fresno	1989
Civil Engineering	B S / M S	CSU Fullerton	1991
Electrical Engineering	B S / M.S	CSU Fullerton	1991
Mechanical Engineering	B S / M S	CSU Fullerton	1991
Civil Engineering	B S	Humboldt State University	1989
Engineering Technology	B S	CSU Long Beach	1989
Construction Management	B S	CSU Sacramento	1989
Engineering	M S	San Francisco State	1990
Quality Assurance	M S	San Jose State University	1989
Structural Engineering	M S	CSU San Luis Obispo	1989
Engineering	M S /Ph D	UC Riverside	1994-95
Materials Science	M A /Ph D	UC San Diego	1989
Fine and Performing Arts			
Arts	B F A	UC Los Angeles	1990
Design	B F A	UC Los Angeles	1990
Art	B F A	CSU Dominguez Hills	1993
Art	B F A	CSU Northridge	1991
Art	B F A	CSU Sacramento	1990

* Projected doctoral programs are listed in italics at the end of each of these disciplinary categories

(continued)

DISPLAY 1 (continued)

Art	M A	CSU San Bernardino	1990
Art	B F A	San Diego State Univ	1990
Art	B F A	Sonoma State	1990
Art	B F A	CSU Stanislaus	1990
Dance	M F A	UC Los Angeles	1989
Dance	M F A	UC Santa Barbara	1989
Dance	B A	CSU Fullerton	1990
Dance	B F A	CSU Long Beach	1989
Dance	M F A	CSU Long Beach	1991
Dance	Ph D	UC Los Angeles	1989-90
Dance History	Ph D	UC Riverside	1990
Textile Arts and Costume Design	M F A	UC Davis	1989
Theatre Arts	M F A	UC Santa Cruz	1991-92
Theatre Arts	B A	CSU Bakersfield	1991
Theatre Arts	M F A	CSU Fresno	1990
Theatre Arts	B F A	CSU Northridge	1990
Dramatic Theory and Criticism	Ph D	UC Irvine	1990-91
Dramaturgy / Dramatic Literature	Ph D or DFA	UC San Diego	1992
Music (Instrumental, Vocal, and Conducting Performance)	M M	UC Los Angeles	1990
Music Theater	B A	UC Los Angeles	1990
Music	B A	CSU Bakersfield	1990
Music	M M.	CSU Los Angeles	1990
Music	B A	CSU San Luis Obispo	1990
Music	Ph D	UC Davis	1989
Musical Arts (Instrumental, Vocal, and Conducting Performance)	D M A	UC Los Angeles	1990
Music	M M /D M A	UC Santa Barbara	1989

Projected programs in fields with uncertain student or societal demand

Applied Studies	B S	CSU Dominguez Hills	1989
Celtic Studies	A B	UC Berkeley	Indeterminate
Classical Studies	M A	UC San Diego	1993
Cognitive Studies	B A	CSU Stanislaus	1991
Communications	M A	CSU San Bernardino	1990
Computer Information Systems	B S	CSU Chico	1991
Computer Information Systems	M S	CSU Los Angeles	1990
Creative Writing	M F A	San Francisco State	1990
Health Care Administration	M S	CSU Long Beach	1989
Health Care Management	M S	CSU Dominguez Hills	1990
Health Science	B S	CSU Fullerton	1990
Human Resource Development	M S	CSU Chico	1989
Humanities	M A	CSU San Bernardino	1990

(continued)

DISPLAY 1 (continued)

Liberal Studies	M A	CSU Long Beach	1990
Liberal Studies	M A	CSU Sacramento	1990
Management Information Systems	M S	CSU Bakersfield	1991
Recreation Administration	B A	Humboldt State Univ	1989
Social Science	M A	CSU San Bernardino	1989
Sport Management	B A	CSU Los Angeles	1990
Technical and Professional Writing	B A	San Francisco State	1990
Telecommunications	B S	CSU Dominguez Hills	1989
Women Studies	M A	San Francisco State	1990

Projected programs in fields currently undergoing public scrutiny or professional review

Educational Administration	M A	CSU Bakersfield	1990
Educational Administration	*Ed D*	*CSU Sacramento & UOP*	*1990*
Education	*Ed D /Ph D*	*UC Davis*	*1991*
Educational Administration	*Ed.D*	*UC Irvine*	*1989-90*
Educational Administration	*Ed.D*	*UC Los Angeles*	*Indeterminate*
Educational Leadership	*Ed.D*	*UC Systemwide and CSU Fresno*	*1990*
Physical Therapy	M S	UCSF and SF State	1989
Physical Therapy	M P T	CSU Fresno	1989
Physical Therapy	M P T	CSU Long Beach	1989
Physical Therapy	M P T	CSU Northridge	1990
Physical Therapy	M S	San Diego State Univ	1990
Nursing	B S / M S	CSU Dominguez Hills	1989
Nursing	M S	CSU Fullerton	1992
Nursing	B S	CSU Northridge	1990

Projected programs in fields where there are few established models

Art Therapy	M A	CSU Los Angeles	1989
Aviation	B S	CSU Los Angeles	1990
Cognitive Science	A B	UC Berkeley	Within 5 yrs
Facilities Design & Management	M F D M	UC Irvine	1989-90
Fisheries Management	M S	UC Davis	Within 5 yrs
Gerontology	B A	CSU Sacramento	1989
Gerontology	M S	San Jose State Univ	1989
Gerontology	M S	CSU Stanislaus	1991
Graphic Communication	B S	CSU Los Angeles	1990
Photographic Studies	M A /M F A	UC Riverside	1989
Social Documentation	M A	UC Santa Cruz	1990-91
Technical and Professional Writing	B A	San Francisco State	1990

Projected programs requiring substantial increases in faculty or facilities

Cognitive Science	B A	UC San Diego	1989
Environmental Studies	M.A	UC Santa Barbara	1989

3 *Assessing Proposals for New Programs*

Overview of proposals

The next stage in academic program evaluation's life cycle occurs when a campus, from its list of projected programs, submits a comprehensive proposal for a specific program to the systemwide office which, after careful review, submits it to the Commission As shown in Display 2 below, the segments submitted a total of 41 proposals for new programs to the Commission during the period of July 1, 1987 to June 30, 1988 -- the fewest number since figures began to be compiled in 1976-77 The proposal for a joint doctorate in engineering sciences/applied mechanics between San Diego State University and the University of California at San Diego is counted twice, against the total for both the University of California and the California State University

DISPLAY 2 Number of Proposals for New Programs Received from Each Public Segment Since 1976-77

Year	California Community Colleges	The California State University	University of California	Total
1976-77	93	29	17	139
1977-78	101	20	15	136
1978-79	55	17	13	85
1979-80	43	16	12	71
1980-81	51	17	9	77
1981-82	43	11	5	62
1982-83	32	27	8	65
1983-84	16	23	6	45
1984-85	25	22	4	51
1985-86	27	9	7	43
1986-87	26	19	5	50
1987-88	15	21*	5*	41

* Includes one joint doctorate

Source California Postsecondary Education Commission files

California Community Colleges

The 15 new programs from the California Community Colleges represent a precipitous drop from former years when the two-year colleges proposed an average of 46 new programs a year, ranging from a high of 101 in 1977-78 to a previous low of 16 in 1983-84 Unlike previous years, the programs are not clustered almost entirely in the health sciences and technology Rather, they span a number of fields and bear testament to the diversity offered by the State's community colleges -- floor covering crafts, registered nursing, hotel/restaurant/tourism management, industrial electronics, human services studies, television production and operations, quality assurance, mass communications, nutrition management, early childhood education, addiction counseling, photography, electrician apprenticeship, and psychiatric technician apprenticeship In some cases, these new programs have grown out of options or concentrations within other degree programs, which has allowed them to demonstrate their viability and to be often offered without additional faculty or resources

The California State University

Twelve of the 19 campuses in the California State University submitted 21 proposals for new programs, nearly two-thirds of them directed toward graduate degrees The programs include a wide range of academic and occupational fields -- environmental studies, health sciences, nutritional science, ethnic studies, engineering (2 proposals), art, religious studies, industrial technology, special education, educational administration, counseling, mathematics, linguistics, health care administration, theatre arts, gerontology, computer science (2), and computer information systems Ten of these proposals fell in the category of "information only" as the programs did not appear on the Commission's list of projected programs to review Based on this list, Commission staff primarily reviewed programs

in the health sciences, engineering, and computer sciences

University of California

Although four new program proposals from the University of California appears minimal in comparison to the other segments, this number is in keeping with University submissions in recent years To a certain degree, however, the University numbers are not comparable to the State University totals, since the University does not send the Commission any "information only" proposals as the State University does, and may therefore offer new programs that are not reflected in the totals in Display 2 (The University also does not submit proposals for its Organized Research Units or Multicampus Research Units All existing ORUs and MRUs are listed in Appendix C)

The following commentary reviews the proposals of each segment independently, except for the first joint proposal, while Display 3 on pages 17-19 lists all the 1987-88 proposals by date received, campus, program, degree, and Commission staff decision

Joint doctorate in engineering sciences/applied mechanics between the University of California, San Diego, and San Diego State University

Commission staff concurred, with conditions, to a joint doctorate in engineering sciences/applied mechanics proposed by the University of California, San Diego (UCSD), and San Diego State University (SDSU) Most joint programs demonstrate a complementarity of staff interests that ameliorate deficiencies in one or both of the participating departments, but such deficiencies were not in evidence here Consequently, staff raised questions about how students would benefit from dividing their time between the two campuses and why students completing the master's degree at SDSU could not move smoothly into the doctoral program at UCSD Enrollment figures and excessive costs per graduate were also questioned Although concurrence was given, the program was denied funding in the State budget which, in the commentary supporting the decision, cited several of the reasons noted by Commission staff

University of California

The four proposals for new programs from the University equal the smallest number ever submitted by the system since these reports started They include three graduate program proposals -- environmental toxicology (Irvine), exercise science (Davis), and computer engineering (Santa Cruz) -- and another for a college of engineering at Riverside As each offers evidence of varied Commission concerns regarding program duplication, costs, enrollments, demand, job market needs, representative gender and ethnicity, and facilities, a specific description of each is in order

Environmental toxicology

With the Irvine proposal for an M S /Ph D program in environmental toxicology, Commission staff was concerned that it had concurred only a few months earlier with a similar graduate program on the Riverside campus It consequently recommended that each program title be identified with its distinctive emphasis and that both campuses immediately undertake formal cooperative arrangements such as sharing seminar speakers and encouraging cross-registration The fact that the Irvine program, formerly available as an emphasis, could be elevated to degree status with no additional faculty or resources stood in its favor

Exercise science

The M S degree in exercise science at Davis was proposed as a new degree within a physical education program that already offered a M A degree It was unusual in that it did not appear in the Campus Academic Plan, thus exemplifying the flexibility needed when a discipline, societal expectations, student goals, and faculty training change to the extent that a new degree is called for

Computer engineering

The M S /Ph D program in computer engineering proposed by the Santa Cruz campus presented unexpected problems when staff discovered that when the bachelor's degree had been approved for the campus in 1983, a number of conditions had been set forth if a graduate program were ever proposed Unaware of the earlier correspondence, the architects of the proposal did not respond to those earlier conditions nor to the anomalies that resulted when current information was compared to earlier data The campus responded fully to the questions raised about enrollment growth, undergraduate to graduate ratio, and faculty size Staff suggested continued monitoring both of the number of students enrolling in the program and the representation of women and minorities in those numbers

Engineering

In March 1988, the University proposed to establish a college of engineering at Riverside and submitted a conceptual outline to the Commission that would allow the University to establish the administrative structure of the college, i e , hiring a dean and faculty, rather than specific degree programs The University noted that it anticipated that the college would begin by establishing undergraduate programs in chemical/biochemical engineering, electrical engineering, and environmental engineering Commission staff expressed its concerns about a chemical engineering program, given the depressed outlook for graduates of these programs, and questioned the costs for the college, particularly for space and staffing After clarification on these issues, staff concurred with the University's recommendation for approval

The California State University

In contrast to the 19 proposals submitted by the State University in 1986-87 and nine in 1985-86, the system submitted 21 during 1987-88, with ten of them for "information only " Other than three baccalaureate degree programs -- religious studies at Humboldt, health care administration at Long Beach, and gerontology at San Diego -- the remaining proposals were for M S degrees in environmental studies (San Jose), health sciences (San Bernardino), a variety of engineering programs at San Luis Obispo, computer science (Hayward and Long Beach), and counseling (Bakersfield) The "information only" proposals divided evenly between baccalaureate degree programs (art, industrial technology, applied and computational mathematics, computer information systems, and linguistics) and those at the master's level (ethnic studies, special education, educational administration, theatre arts, and nutritional science) Some descriptive detail follows

Religious studies

The bachelor of arts major in religious studies had actually existed on the Humboldt campus as a program for over ten years -- for most of those years as an upper-division component in general education The coursework, therefore, already stood in place and very few additional resources were needed -- a persuasive argument to Commission staff Other arguments in its favor were an interdisciplinary faculty and a comparatively small size, as it will likely serve as a second major for the majority of students choosing to enroll

Gerontology

Despite the fact that there is no unanimity of thought among professional gerontologists on whether there is need for baccalaureate programs in this area, Commission staff concurred with the Chancellor's Office recommendation to approve a small gerontology program at San Diego State University, sponsored by the University Center on Aging in the College of Health and Human Services It will be the first such baccalaureate degree program in any of California's public institutions Staff was persuaded by the campus' very complete and thoughtfully written proposal, by the fact that the necessary resources are already in place, and because the curriculum is similar to other multidisciplinary liberal arts majors, particularly in the social sciences Questions were raised about the need for economics courses in a major that is defined as "the study and application of knowledge about the physical, social, and economic conditions of older people," the need for articulation with the com-

munity colleges, and the lateness of the proposal's submission

Health care administration

The program in health care administration proposed by Long Beach replaces that offered formerly under the Consortium of the State University. The curriculum is substantially the same except for new courses in personnel management, financial management, marketing, and the like which had to be developed under the health care program, the campus believes, rather than having students take the coursework in the school of business since that school is impacted Although six State University campuses offer a concentration within another bachelor's degree, few baccalaureate degree programs in this major exist The program is seeking membership in the Association of University Programs in Health Administration, other than Northridge, the remaining campuses do not meet the organization's minimum criteria Commission staff urged articulation with the community colleges and advised better manpower projections

Computer science

The two M S degree programs in computer science proposed by Long Beach and Hayward brought up two major issues that frequently surface during the program approval process -- what a program and campus's connection should be with industry and the need for an overall plan to guide future growth and development of those disciplines that generate a number of proposals Commission staff continues to recommend some sort of intersegmental review to determine, in this case for example, how computer science and computer engineering differ, and how the number and type of existing programs relate to current student demand and the future employment market

Environmental studies

This master's degree in environmental studies at San Jose State evolved from a well-regarded undergraduate program and appeared well-justified in a resource sense with plans to attract between 30 and 40 new students with no additional full-time-equivalent faculty But Commission staff had reservations about its seemingly loose structure and vague statement of purpose and, although concurring, noted that the Commission was trusting the judgment of Chancellor's Office staff In return, the Chancellor's Office sent campus documents that explicitly addressed the concerns raised by the Commission, although concurrence with the program had already been granted This response symbolizes the kind of working relationship most beneficial to academic program evaluation

Health sciences

San Bernardino originally submitted a proposal for a two-year program in health sciences for purposes of accreditation but then chose not to seek accreditation immediately and revised the program to one year Feeling that plans to offer several concentrations would spread the program's already limited resources too far and citing results of a market survey as also supporting a more restricted focus, Commission staff strongly recommended that the program focus on health services administration and label the program accordingly, thus avoiding the imprecise title "Health Sciences "

Engineering

The engineering proposals from the San Luis Obispo campus represent less a new effort than a restructuring and retitling of an existing program It contains a number of academic intricacies that are potentially powerful in assuring quality the conversion of existing options to separate degree programs and the conversion of an existing degree program (a master of engineering) to a M S in engineering with four options -- with the chance for three of these options, being new, to demonstrate their drawing power The campus is also responding to what it perceives to be five-year programs of study for entry into the profession of engineering

Counseling

The Bakersfield campus designed its master of science degree in counseling to meet the educational requirements for licensing of marriage, family, and child counselors established by legislation and requiring at least 48 semester units of study The program was also designed to meet proposed new re-

quirements for the credentialing of school counselors Although there remained some question as to whether the campus would discontinue the 30-unit option in counseling and personnel services within the M A in education and the proposal did not provide compelling evidence of job market demand, Commission staff concurred with the proposal on the basis of sufficient student demand and campus commitment of support

California Community Colleges

The sharp decline in the Community Colleges to 15 proposals for new programs from an average of 46 a year, or even from 26 the preceding year, is puzzling To what can the decrease be attributed? Were the colleges in 1987-88 so involved with implementing matriculation that they gave little thought to new programs? Did concerns about funding override all other considerations? Was the curriculum already sufficiently comprehensive? Did enrollment increases cause the expansion of existing courses and programs rather than the start-up of new courses and programs? Were new programs actually begun but without Chancellor's Office review and approval? Did the Chancellor's Office return proposals to the colleges which were then never resubmitted? The Commission believes that the work currently being done by Chancellor's Office staff on revising its course and program approval procedures will allow answers rather than conjectures in the years ahead

In general, the Community College proposals are not done as carefully or as completely as those from the University or State University Although the Commission recognizes the unique function of the Community Colleges in responding to local needs through short-term programs, certificates, apprenticeships, and the like, it hopes that standards for all programs can be brought to the same level as that exhibited by the four-year segments At the same time, the proposals also generate some of the same concerns that Commission staff bring to all submissions -- imprecision in program titles ("human services studies" here refers to work with the noninstitutionalized elderly), lack of job market information, inordinate or invisible resource needs, reliance on part-time faculty, lack of general education requirements, gender and ethnic equity, relationships with industry, late submission, and lack of articulation agreements

DISPLAY 3 *Proposals for New Programs submitted to the Commission, July 1, 1987 to June 30, 1988*

Date Submitted	Campus	Program	Degree(s)	Decision
Joint Doctorate				
10/7/87	San Diego State/ UCSD	Engineering Sciences/ Applied Mechanics	Ph D	More information Concur with conditions
University of California				
9/9/87	Irvine	Environmental Toxicology	M S /Ph D	Concur
11/4/87	Davis	Exercise Science	M S	Concur
4/4/88	Riverside	College of Engineering	(B S /M S / Ph D)	Concur
6/22/88	Santa Cruz	Computer Engineering	M S /Ph D	More information Concur

(continued)

Display 3 (continued)

Date Submitted	Campus	Program	Degree(s)	Decision
The California State University				
7/6/87	San Jose	Environmental Studies	M S	Concur
7/22/87	San Bernardino	Health Sciences	M S	Concur
9/4/87	San Francisco	Ethnic Studies	M A	Sent for information only
9/14/87	San Luis Obispo	Civil, Environmental, Aeronautical, Electronic, and Electrical Engineering	M S	Concur
9/14/87	San Luis Obispo	Engineering with options in mechanical, industrial, biochemical, and metallurgical engineering	M S	Concur
10/9/87	Bakersfield	Art	B A	Sent for information only
10/16/87	Humboldt	Religious Studies	B A	Concur
11/12/87	San Francisco	Industrial Technology	B S	Sent for information only
11/13/87	Northridge	Special Education	M A	Sent for information only
11/13/87	Northridge	Educational Administration	M A	Sent for information only
11/13/87	Bakersfield	Counseling	M S	Concur
2/2/88	San Jose	Applied and Computational Mathematics	B S	Sent for information only
3/9/88	San Jose	Linguistics	B A	Sent for information only
3/14/88	Long Beach	Health Care Administration	B S	Concur
5/10/88	San Francisco	Theatre Arts	M F A	Sent for information only
5/27/88	San Diego	Gerontology	B A	Concur
6/1/88	Hayward	Computer Science	M S	Concur
6/6/88	Chico	Nutritional Science	M S	Sent for information only
6/13/88	Stanislaus	Computer Information Systems	B S	Sent for information only
6/17/88	Long Beach	Computer Science	M S	Concur
California Community Colleges				
7/31/87	Butte	Honors Program	A A	Concur with conditions
7/31/87	Foothill	Floor Covering Crafts	Apprenticeship	No Action

(continued)

Display 3 (concluded)

Date Submitted	Campus	Program	Degree(s)	Decision
California Community Colleges (continued)				
7/31/87	Mt San Jacinto	Registered Nursing	A A	Concur
8/4/87	Mira Costa	Hotel/Restaurant/Tourism Management	A A /Cert	Concur
9/9/87	Oxnard	Industrial Electronics	A A /Cert	Concur
11/3/87	Foothill	Human Services Studies	Cert	Concur with conditions
11/4/87	Golden West	Television Production and Operations	A A /Cert	Concur
11/13/87	Rancho Santiago	Quality Assurance	Cert	Concur
1/28/88	Rio Hondo	Mass Communications	A A /Cert	Concur
5/12/88	Imperial	Nutrition Management	A A /Cert	More information
5/12/88	College of the Desert	Early Childhood Education	A A /Cert	More information
5/16/88	Butte	Addiction Counseling	A A /Cert	More information
6/17/88	West Valley	Photography	A A /Cert	More information
6/22/88	Palomar	Electrician Apprenticeship Training Program	A A /Cert	Concur
6/29/88	Golden West	Psychiatric Technician Apprenticeship	Cert	Concur

4 *Reviewing Existing Programs*

IF ACADEMIC program evaluation's youth lies in projected and new programs, then the review of existing programs must represent its maturity Judging from the number and comprehensiveness of the program reviews done during 1987-88 by campuses of the University of California and the California State University (Display 4, pages 23-27), this stage in its life cycle is robust indeed

All University and State University campuses have established a five-to-seven year schedule for the review of existing programs. The State University Trustees' action in 1971 requiring this periodic review of academic programs and calling upon each campus to develop its own review policies and procedures was, in fact, among the first of its kind in the country

While many community colleges may have review procedures in place, no record of their nature and extent has as yet been shared with the Commission However, staff from the Chancellor's Office of the California Community Colleges will meet in late September to explore some approaches to strengthening the program review function Commission staff has asked to be apprised of the outcomes of these meetings

For the State University, program review generally begins with a departmental self-study, treating specific topics and questions and sometimes including surveys of students, faculty, and alumni Appendix D provides a sample of questions taken from the program review documents of selected campuses and gives a picture of the broad issues on which program review may focus When completed, the self-study may be submitted to the dean of the appropriate school, other administrative officers, an Academic Senate review committee, or to a number of like parties In addition, an external team of reviewers is often invited to campus to review the self-study, interview students, faculty, and administrators, and submit their own observations on program strengths and weaknesses These views are cited in a final report This review process is similar to that undertaken by campuses of the University of California where reviews are conducted by internal faculty committees and external review panels chosen from academia and sometimes industry

Because each campus in the four-year systems develops its own criteria and procedures, there is no single model for program review Campuses are required only to establish a formal schedule of review and report the results On the whole, however, University of California campuses appear to be much more similar in what they look at and the process they follow than those in the State University system

Using the data transmitted by the campuses, Chancellor's Office staff annually prepares a report on program review activities that is presented to the State University Trustees at their March meeting The report includes a list of the programs scheduled for review during the past academic year and a summary of each review's major findings and recommendations The Office of the President of the University of California prepares a similar document for submission to the Commission These reports should be required reading for any observer of higher education in California, for they reveal the richness and diversity of the academic enterprise and the seriousness with which the campuses take their responsibility to determine curricular quality and effectiveness Still, the campus accounts display a variety of approaches to the review process, some clearly more thorough and objective than others In the 1987-88 reports, a few State University campuses seem reluctant to record a single negative comment and reach new heights of hyperbole, while at least one University of California campus appears to be emphasizing its graduate program review to the detriment of its undergraduate efforts, having reviewed only one undergraduate program that year, deferring review of five others to a later time, and beginning the review of another six so late in the year that results are still pending While the procedures of program review must naturally be adjusted to the distinctive character and organizational structure of each campus, Commission staff believes that the program elements to be examined in a review should be similar and time schedules at least loosely adhered to The two State University

campuses that rescheduled all programs reviews while they were revising their review processes -- an activity with long-term benefits, to be sure -- may have difficulty in maintaining their regular cycle of review

On the other hand, the University campuses are providing in their reports a more uniform level of summary detail in the area of findings and recommendations and continue to exhibit a high degree of rigor and tough-mindedness overall The report from the President's Office has also been improved with the inclusion of follow-up actions on recommendations from previous year's reviews that enable the reader to maintain some sense of continuity with previous years' work The document includes information on regularly scheduled reviews, reviews done for planning purposes, reviews begun in conformance with administrative policies and procedures, reviews that follow-up earlier committee recommendations, reviews needed for accreditation, and reviews done for still other reasons

The 151 program reviews done by the campuses of the State University range from five on one small campus to 17 on a large urban one, unlike last year when four campuses reviewed only two or three programs each An adequate number of annual reviews is important to maintain since a minimal level of effort makes it virtually impossible to cover the curriculum every five to seven years Although many of the campuses are able to describe a program in terms of both its strengths and weaknesses, the credibility of the review process suffers on those campuses that, in summarizing the review findings for a number of programs, mention not a single weakness in any of them Perhaps they should follow the lead of the Sacramento and San Diego campuses, which are among those campuses with particularly strong review processes in place Sacramento gives a balanced view of one of its programs when it writes

> The program is unique as it is the only one in the system, and the faculty is commended for developing and maintaining a nationally respected program of high quality The program is small but enrollments have been stable over the past five years The level of support received from the University is sufficiently high to provide small classes and the kind of individualized attention to graduate students that make for a program of quality as well as the time for faculty to engage in significant research and service to the community
>
> Program strengths include the well-qualified faculty, small class sizes, the numerous community resources, and the uncompromising standards for admission to the program and for the culminating requirement for the degree Cited program weaknesses are too few full-time students, no ethnic minority students, and inadequate physical facilities

And San Diego certainly leaves the impression that it has conducted a conscientious and objective evaluation when it candidly states

> Immediate need for new departmental leadership, space, equipment, and alternate faculty decision-making process The physical renovation will cause major disruptions for faculty and students Computer capabilities need expansion Support staff needs upgrading Undergraduate and graduate instruction is excellent Student advising needs improvement

The systemwide offices of each segment could assist their campuses to strengthen the process of program review by completing two projects that have been long begun though not completed because of more pressing priorities The State University has been conducting a systemwide evaluation of program review procedures that will lead to the publication of a handbook outlining the suggested components of each review, listing reporting requirements, and identifying procedures on various campuses that have proved effective At the University, the *Handbook for the Coordinating Committee on Graduate Affairs* needs revision along with a program review handbook originally issued ten years ago This elemental step may encourage increased effectiveness and consistency of a process that while depending to a great extent on campus initiative and concern can also benefit from guidance and direction from a central source, and the Commission strongly supports such an effort

DISPLAY 4 *Reviews of Existing Programs, Areas, and Organized Research Units in the University of California and the California State University, 1987-88*

University of California

Berkeley

Aeronautics and Aerospace
Agricultural and Resource Economics
Anthropology
Architecture (M Arch)
Institute of Business and Economic Research
Chemical Engineering (B S)
City and Regional Planning (M C P)
Dietetics
Dramatic Art
Energy and Resources (M A /M S /Ph D)
Fluid Mechanics
German
Health Services Management (M P H /M B A)
Institute of Industrial Relations
Advanced Reading Specialist Credential
Materials Engineering
Multiple and Single Subject Credential Programs
Oriental Languages
Institute of Personality Assessment and Research
Pest Management Program (Undergraduate)
Physical Education
Plant Pathology (Undergraduate and Graduate)
Plant and Soil Biology
Public Health Nutrition (M P H)
School of Public Health (All)
Pupil Personnel Services Credential
Spanish and Portuguese
Surface and Subsurface Hydrology

Davis

School of Medicine-Residency Reviews in General Surgery, Plastic Surgery, Anesthesiology, Child Psychiatry, and Family Practice
Geography (A B /B S)
East Asian Studies (A B)
Education
Mexican American Studies (A B)
Women's Studies (A B)
American Studies (A B)
Biological Sciences (A B /B S)
English (A B /M A /Ph D)
Geography (A B /B S)
German and Russian (A B)
Integrated Studies
Linguistics (A B /M A)
Medieval Studies (A B)
Political Science (A B /M A /Ph D)
Psychology (A B /B S)
Religious Studies (A B)
Spanish and Classics (A B)
Statistics (A B /B S)
Zoology (A B /B S /M A /Ph D)
Art Studio and Art History (A B)
Dramatic Art (A B)
Individual Majors (A B /B S)
International Relations (A B)
Rhetoric and Communication (A B)
School of Veterinary Medicine
Agricultural Economics (M S /Ph D)
Avian Sciences (M S)
Chemical Engineering (M S /Ph D)
Economics (M A /Ph D)
German (M A /Ph D)
Mathematics (M A /M A T /Ph D)
Russian (M A)
Sociology (M A /Ph D)
Soil Science (M S /Ph D)
Crocker Nuclear Laboratory
Laboratory for Energy-Related Health Research
Agricultural Education (B S)
Agrarian Studies (B S)
Design (B S)
Environmental Planning and Management (B S)
Environmental Policy Analysis and Planning (B S)
Individual Major (B S)
International Agricultural Development (B S)
Landscape Architecture (B S)
Plant Science (B S)
Wildlife and Fisheries Biology (B S)
Genetics (B S)

Irvine

School of Humanities (Graduate)

(continued)

DISPLAY 4 (continued)

School of Social Sciences (Undergraduate and Graduate)
Genetics Counseling (M S)
Preliminary Administrative Services Credential
Multiple Subjects
Multiple Subjects, Bilingual Emphasis
Multiple Subjects, Internship
Resource Specialist
Single Subject
Single Subject, Internship
Learning Handicapped Credential
Severely Handicapped Credential

Los Angeles

African American Studies (M A)
Asian American Studies (M A)
Astronomy (B S /M S /M A T /Ph D)
Biology (M A /Ph D)
Computer Science (B S /M S /Ph D)
Kinesiology (B S /M S./Ph D)
Latin American Studies (B A /M A)
Materials Science and Engineering (B S /M S /Ph D)
Public Health (M P H /M S /Dr P H /Ph D)
Chicano Studies (B A)
East Asian Studies (B A)
Electrical Engineering (B S)
School of Public Health
Jules Stein Eye Institute

Riverside

Art History (M A)
Biochemistry (M S /Ph D)
Music (M A)
Dance History (M A)
Entomology (M S /Ph D)
History (M A /Ph D)
English (M A /Ph D)
Management (M B A)
Physics (M A /M S /Ph D)
Soil and Environmental Sciences (M S./Ph D)
Statewide Air Pollution Research Center

San Diego

Sociology (Undergraduate)
Biology (Undergraduate)
Academic Internship Program (Undergraduate)
Judaic Studies Program (Undergraduate)
Psychology (Undergraduate)
Teacher Education (Undergraduate)
Philosophy (Undergraduate)
Anthropology (Ph D)
Psychology (Ph D)
Biology (Ph D)
Group and Institute for Cognitive Science (Ph D)
Physiology/Pharmacology Group (Ph D)
Political Science (Ph D)
Scripps Institute of Oceanography (Ph D)
Visual Arts (M F A)
Center for Molecular Genetics
Institute for Pure and Applied Physical Sciences
Center for Music Experiment
Center for Iberian and Latin American Studies

San Francisco

Doctor of Nursing Science (D N Sc)
History of Health Sciences (M A /Ph D)
Genetics (Ph D)

Santa Barbara

Institute of Environmental Stress
Social Process Research Institute
Computer Systems Laboratory
Center for Chicano Studies
Center for Black Studies and Community and Organization Research Institute
Accounting program emphasis in Economics (Undergraduate and Graduate)
Classics (Undergraduate and Graduate)
Electrical and Computer Engineering (Undergraduate and Graduate)
English (Undergraduate and Graduate)
History (Undergraduate and Graduate)
Religious Studies (Undergraduate and Graduate)

(continued)

DISPLAY 4 (continued)

Santa Cruz

Community Studies (B A)
History (B A /M A /Ph D)
Literature (B A /M A /Ph D)
Politics (B A)

Multicampus Research Units

Water Resources Center
Lick Observatory
California Space Institute
Statewide Air Pollution Research Center

The California State University

Bakersfield

Business Administration (B S /M B A)
Chemistry (B S)
Education (M A)
Mathematics (B S)
Nursing (B S)
Physical Education (B S)

Chico

French (B A)
Geography (B A /M A)
German (B A)
International Relations (B A)
Latin American Studies (B A)
Mathematics (B S)
Philosophy (B A)
Political Science (B A /M A)
Public Administration (B A /MPA)
Spanish (B A)
Speech Pathology and Audiology (B A /M A)

Dominguez Hills

All scheduled reviews postponed to 1988-89

Fresno

Agricultural Business (M S)
Criminology (M S)
Geography (M A)
Health Science (M S)
International Relations (M A)
Microbiology (M A)
Speech (M A)

Fullerton

Art (B A /BFA/M A /M F A)
Biology and Biological Science (B A /M A)
Business Administration (B A /M B A)
Computer Science (B S /M S)
Criminal Justice (B A)
Economics (B A /M B A)
Physical Education (B S /M S)
Psychology (B A /M A /M S)
Social Sciences (M A)

Hayward

Biological Sciences (B A /B S /M S)
Chemistry (B A /B S /M S)
Geological Sciences (B A /B S /M S)
Health Sciences (B S)
Mathematics and Computer Science (B S /M S)
Nursing (B S)
Physical Science (B S)
Physics (B A /B S)
Psychology (B A /B S)
Statistics (B S /M S)

Humboldt

Art (B A /M A)
Economics (B S)
Liberal Studies-Language Studies Option (B A)
Range Management (B S)
General Education (A D)

Long Beach

Asian Studies (B A /M A)
Business Administration (B S /M S /M B A)
Home Economics Environmental Factor-Interiors Option (B A)

(continued)

DISPLAY 4 (continued)

Industrial Technology Construction Management Option (B S)
Psychology (B A /M A./M S)
Public Adminstration (M P A)
Recreation (B A)
Social Work (B A /M S W)

Los Angeles

Anthropology (B A /M A)
Biochemistry (B S)
Chemistry (B A /B S /M S)
Computer Science (B S)
Latin American Studies (B S /M A)
Rehabilitation Counseling (B S)
Social Work (B A)
Special Major (B A /M A /M S)
Speech Communication (B A /M A)
General Education

Northridge

Art (B A /M A)
Business Administration (B S /B A /M S /M B.A)
Engineering (B S)
Health Science (B S /M S /M P H)
Philosophy (B A)
Theatre (B A /M A)
Urban Studies (B A)

Pomona

Botany (B S)
Fruit Industries (B S)
International Agriculture (B S)
Park Administration (B S)
Physical Education (B S /M S)
Recreation Administration (B S)
Zoology (B S)

Sacramento

Biomedical Engineering (M S)
Civil Engineering (B S /M S)
English (B A /M A)
History (B.A /M A)
Home Economics (B A)
Humanities (B A)
Mechanical Engineering (B S /M S)
Philosophy (B A)
Recreation and Leisure Studies (B S /M S)
Social Work (B A /M S W)

San Bernardino

Art (B A)
Communication (B A)
English (B A)
English Composition (M A)
French (B A)
Humanities (B A)
Liberal Studies (B A)
Music (B A)
Philosophy (B A)
Spanish (B A)
Theatre Arts (B A)

San Diego

Chemical Physics (B S)
Chemistry (B A /B S /M A /Ph D)
German (B A /M A)
History (B A /M A)
Mechanical Engineering (B S /M S)
Philosophy (B A /M A)
Physical Education (B A /M A)
Public History (M A)
Russian (B A /M A)
Spanish and Portuguese (B A /M A)

San Francisco

American Studies (B A)
Chinese (B A /M A)
Classics (B A /M A)
Comparative Literature (B A /M A)
English (B A /M A)
French (B A /M A)
German (B A /M A)
Humanities (B A /M A)
Italian (B A /M A)
Japanese (B A)

(continued)

DISPLAY 4 (continued)

Journalism (B A)
Philosophy (B A /M A)
Philosophy and Religion (B A)
Russian (B A /M A)
Spanish (B A /M A)
Speech Communication (B A /M A)
Women Studies (B A)

San Jose

Administration of Justice (B A /M A)
Dance (B A)
Geography (B S /M A)
Health Science (B S /M A /M.P H)
Linguistics (M A)
Nursing (B S /M S)
Physical Education (B S /M S)
Recreation (B S /M S)
Theatre Arts (Drama) (B A /M A)

San Luis Obispo

All scheduled reviews postponed to 1989-90

Sonoma

Biology (B A /M A)
Communications Studies (B A)
German (B A)
Music (B A)
Philosophy (B A)
Sociology (B A)
Spanish (B A)

Stanislaus

Business Administration (B S /M S /M B A)
Child Development (B A)
Criminal Justice (B A)
Social Science (B A)
Sociology (B A)
Speech Pathology and Audiology (B A /M A)

5 *Recommendations*

THE COMMISSION'S role in the oversight of academic and occupational programs has clearly been an evolving one In the late 1960s, the Coordinating Council for Higher Education -- the Commission's predecessor -- moved to formalize its involvement in program review by drawing up guidelines that identified goals for the review process and outlined procedures to be followed by the Council in its relationship with segmental offices When finally adopted in March 1971, these guidelines provided for annual Council review of segmental academic plans and of programs outside the "core" that had not appeared in the academic plan for the previous two years or that required additional staff, equipment, or funds to initiate ("Core programs" were those that segmental and Council staff agreed in advance were essential to the basic curriculum of a comprehensive campus) The document did not specify what information academic plans or proposals should contain, nor what criteria were to be applied by the Council in its review, indicating that agreement on these matters was to be reached between Council and segmental staff

The bill establishing the California Postsecondary Education Commission (AB 770, Statutes of 1974) contained explicit references to a program review responsibility, making clear however, that the Commission's role was to "review and comment" on programs An *ad hoc* committee of the new Commission, after hearing widely representative testimony, directed the staff to prepare a statement on guidelines and procedures that would incorporate elements of the existing review process which the committee considered important The new guidelines, adopted by the Commission in 1975, borrowed from the Coordinating Council's earlier document but shifted its emphasis from the review of individual program proposals to the review of long-range segmental plans that listed programs projected for two to five years The document also established the Intersegmental Program Review Council and assigned it a central role in advising the Commission on all matters relating to program review Finally, the 1975 guidelines called attention to the importance of campus and segmental review of existing programs and attempted to establish a framework for monitoring such reviews at the State level

In 1981, consultants Frank Bowen and Lyman Glenny were engaged by the Commission to evaluate State-level program review practices in California Their recommendations tended to endorse the directions outlined in 1975

1 They called for greater attention in the review process to State and segmental master plans, including institutional mission statements, and less attention to individual program proposals,

2 They encouraged continuing efforts to refine the review of existing programs, and

3 They recommended periodic intersegmental reviews of selected program areas

Commission staff thereupon revised the 1975 guidelines for review by segmental representatives The version that currently guides Commission work was adopted at the December 1981 meeting of the Commission

Now, nearly eight years later, what should be the Commission's priorities, given the challenges of growth that California higher education faces? And what are the State's needs? Because information from program projection, approval, and review can inform planning, both the State and the Commission benefit from strong academic program evaluation at the campus and segmental levels Can these practices be strengthened? Are campus review processes tied to local planning and research? How can academic program evaluation at all levels be better linked to long-range strategic planning, budgeting, coordination, accreditation, institutional research, and economic development issues?

Given the need to answer these questions, the following recommendations are offered

1. **The Commission should in the next year develop a plan for how its program evaluation**

and review functions might be strengthened. In its deliberations, it should seek the advice of the Intersegmental Program Review Council who should be asked to consider the following agenda: the identification of statewide, Commission, segmental, and institutional roles and responsibilities; discussion of segmental planning efforts, particularly in discipline areas where questions have been raised by the Commission about program duplication, costs, need, demand, and the like; exploration of how academic program evaluation at all levels can be better integrated with long-range strategic planning and the other functions cited above; and review of other academic policy matters with intersegmental implications. Priorities among these issues shall be determined following further discussions by the Intersegmental Program Review Council in September.

2. The need for intersegmental reviews of programs in the fine and performing arts, computer science, computer engineering, and the health professions should be determined and, if warranted, such reviews should be aggressively pursued. The list of projected programs sent annually to the Commission should serve as the basis for selecting programs for intersegmental review.

3. Beyond whatever intersegmental reviews are undertaken, segmental offices should undertake as many systemwide reviews of programs in selected fields as internal resources allow. The process and outcomes of these reviews should be discussed with the Intersegmental Program Review Council in the interest of long-range planning. Because the proliferation of engineering programs has been questioned by Commission staff, it would be useful if the State University's review of engineering is completed within the next academic year.

4. The Chancellor's Office of the California Community Colleges should work toward revising its course and program approval processes and improving its coordination of the program review occurring on its campuses as soon as possible. In an effort to monitor its progress, the Commission will expect the Chancellor's Office to submit a summary of program review activities at each college during the preceding year for the Commission's 1990 annual report and, in addition, a list of projected programs at selected colleges, together with a brief descriptive statement for each program, for the 1991 report.

5. The Office of the President at the University of California and the Office of the Chancellor at the California State University should give high priority to completing their respective studies and publications on program review within the coming academic year.

6. In cooperation with the Commission, each segment should develop procedures and conduct reviews of a small number of programs that have been newly established (within the last three to five years) to determine the success of their implementation and their impact on the institution.

Appendix A *State University Guidelines*

Note The following material is reproduced from pages 3-6 of Academic Affairs Policy Memo 88-25 of May 27, 1988, distributed by the Office of the Chancellor of the California State University to all campus presidents

Summary Review of Trustee and System Policies Governing Academic Planning

A. Trustee Guidelines

The following is a summary of academic planning policies which have been adopted over time by the Board of Trustees:

1. Curricula are to reflect the needs of students and of the State.

2. The foundation program for all campuses in the system consists of the liberal arts and sciences, business administration and teaching. (The Board defined specific subject areas which would be regarded as the "Broad Foundation Program." The list was updated in 1979 by the Project Team on Academic Programs and reprinted on page 33 of Academic Program and Resource Planning in The California State University, 1980.)

3. Programs in applied fields and professions other than those above are to be allocated within the system on the basis of (1) needs of the State; (2) needs of the campus service area; and (3) identification of employment opportunities.

4. "All colleges cannot be all things to all people." Curricula in the applied fields and professions are therefore to be located in a systemwide pattern which will achieve an equitable and educationally sound distribution of programs throughout the State.

5. While all colleges may wish to offer the same programs, the Trustees exercise great selectivity in the final approval of new curricula.

6. Specialized, high cost programs are to be allocated on the basis of review and study of the individual subject area.

Subsequent policies adopted by the Board include the following:

7. Degree programs are to be broadly based and of high academic quality.

8. Unnecessary proliferation of degrees and terminologies is to be avoided.

9. A formal review of existing curricula is to be conducted by each campus as a part of the overall planning process.

10. The Academic Master Plans serve as the basis for campus master planning (facilities).

B. Guidelines recommended by the Division of Academic Affairs, Plans (in Academic Program and Resource Planning, July 1980, P. 41):

The traditional criteria for reviewing the academic plans are listed below. They generally center around need, demand, and the ability to establish programs of high quality. These considerations will continue to pertain along with considerations about the appropriateness of new curricula to campus missions.

For the five-year Academic Master Plan of each campus:

1. Are the anticipated resources of the campus (primarily in terms of existing faculty positions and new faculty positions anticipated from total campus enrollment growth) sufficient to initiate and sustain all of the programs offered and projected? If not, will some faculty positions be reassigned from existing programs, or will the number of projected programs be reduced?

2. Is there a campus commitment to placing resources into the development of new programs rather than into existing programs?

For each program projected on the Academic Master Plan:

1. Does this program fill an unmet need in terms of (a) student demand; or (b) statewide or regional manpower needs? If neither of these, is there a compelling rationale for the program?

2. Is the new program the most efficient way of meeting the need identified, or are there other alternatives?

3. Are expectations about student enrollment realistic when compared with experience at other campuses?

4. Do programs exist on the campus or at nearby campuses from which the projected program would draw students? If so, have plans been made for the resulting enrollment declines in existing programs?

5. If the program is one which will prepare students for a specific occupation or profession, are there current surpluses of individuals in the region or in the State so trained? If so, are there indications that the need will increase? If not, is this a wise investment of campus and State resources?

6. If the program is one which is designed to provide professional upgrading of individuals who are already employed, are there openings in the higher professional levels?

7. Will failure to implement this program require altering other plans of the campus? Will some instructional areas be left incomplete?

C. Additional academic planning guidelines suggested by the Division of Academic Affairs, Plans and/or the Committee on Academic Planning and Program Review:

1. New master's degree programs should be projected only where the sponsoring department is well established and has achieved a level of quality which has been affirmed by a program review or, in subjects where national accreditation is available, by a visiting team. Attention should be given to the impact the proposed master's degree will have upon the corresponding bachelor's degree and other instructional activities of the department.

2. Resource investments/reallocations in support of new programs should be sufficient to demonstrate the campus' commitment to the success of those programs. It is rare that a coherent degree major can be designed by merely "repackaging" existing courses in an effort to reduce costs. If new programs cannot be well supported, each campus should seriously consider whether they should be initiated at all.

3. The Academic Plan should be more than a list of new programs. It should represent the collective opinion of campus constituencies about which desired new programs best serve the long-term interests and development of the campus as a whole and which most contribute to advancement toward the campus' goals.

4. New bachelor's degrees should be as enduring as possible in content and title (see EP&R 85-13).

Appendix B *Projected Programs*

Note The following list identifies alphabetically by general field of study all of the projected programs of the University of California and the California State University from 1989-90 to 1994-95 Asterisks indicate those programs listed for the first time.

Agriculture and Natural Resources

Plant Biology*	A B /M A /Ph D	UC Berkeley	1989
Fisheries Management*	M S	UC Davis	Within five years
Environmental Toxicology	M S /Ph.D	UC Santa Cruz	1989-90
Plant Science*	B S	CSU Fresno	1989
Agricultural Engineering Technology*	B S	CSU Fresno	1989
Animal Science*	B S	CSU Fresno	1989
Land Management / Planning*	M A	CSU San Bernardino	1990
Landscape Irrigation Science*	B S	CSU Pomona	1989

Architecture

Facilities Design and Management*	M F D M	UC Irvine	1989-90
Architecture*	M A	UC San Diego	1991
Interior Architecture*	MIA	CSU Pomona	1989
Environmental Design	M S	CSU San Luis Obispo	1989

Biological Sciences

Integrative Biology*	A B /M A /Ph D	UC Berkeley	1989
Molecular and Cell Biology*	A B /M A /Ph D	UC Berkeley	1989
Population and Evolutionary Biology*	Ph D	UC Davis	1989
Human Genetic Disease	Ph D	UC Irvine	1990-91
Genetics	M S	UC Riverside	1990
Biochemistry	B S	CSU Fullerton	1989
Biochemistry	B S	CSU Northridge	1990
Biotechnology*	B S	CSU Pomona	1989

Business and Management

Management Information Systems	M S	CSU Bakersfield	1991
Human Resource Development	M A	CSU Chico	1989
Computer Information Systems*	B S	CSU Chico	1991
Accountancy	M S	CSU Long Beach	1990
Taxation	M S	CSU Long Beach	1990
Computer Information Systems	M S	CSU Los Angeles	1990
Accountancy	M A	CSU San Bernardino	1990
International Business*	B A	San Diego State University	1989
Hotel and Restaurant Management	B S	San Francisco State University	1990
Accountancy	M S	San Francisco State University	1990
Business / Engineering*	M B A /M S	CSU San Luis Obispo	1990

Communications

Human Communication	Ph D	UC Santa Barbara	1990
Social Documentation	M A	UC Santa Cruz	1990-91
Journalism*	B A	CSU Chico	1991
Telecommunications	B S	CSU Dominguez Hills	1989
Graphic Communication*	B S.	CSU Los Angeles	1990
Communications	M A	CSU San Bernardino	1990
Technical and Professional Writing*	B A	San Francisco State University	1990

Computer Science

Computer Science*	Ph D	UC Riverside	1990
Computer Science	M S /Ph D	UC Santa Barbara	1990
Computer Science	M S	CSU Bakersfield	1990
Computer Science	M S	CSU Dominguez Hills	1989
Computer Engineering	B S	CSU Fresno	1989
Computer Science	M S	CSU Fresno	1989
Computer Engineering	B S	CSU Fullerton	1991
Computer Science	M S	CSU Los Angeles	1989
Computer Science	M S	CSU San Bernardino	1990
Computer Engineering	M S	San Jose State University	1989
Computer Science	M S	CSU Stanislaus	1992

Education

Biology	M A T	UC Davis	1992
Education	Ed D /Ph D	UC Davis	1991
Educational Administration*	Ed D	UC Irvine	1989-90
Education Administration	Ed D	UC Los Angeles	Indeterminate
Science/Math	M A T	UC San Diego	1990
Educational Leadership	Ed D	UC Systemwide and CSU Fresno	1990
Educational Administration*	Ed D	CSU Sacramento and UOP	1990
Educational Administration	M A	CSU Bakersfield	1990
Child Development	B A	Humboldt State University	1989
Teaching English to Speakers of Other Languages	M A	CSU Los Angeles	1989
Physical Education*	M S	CSU San Bernardino	1991
Mathematics	M A T	CSU San Bernardino	1989

Engineering

Engineering*	B S /M S /Ph D	UC Riverside	1994-95
Materials Science	M A /Ph D	UC San Diego	1989
Ocean Engineering	B S	UC San Diego	1990
Ocean Engineering	M S	UC San Diego	1994
Electronic Engineering	B S	UC Santa Cruz	1990-91
Construction Management	B S	CSU Fresno	1989
Civil Engineering	B S /M S	CSU Fullerton	1991
Electrical Engineering	B S /M S	CSU Fullerton	1991
Mechanical Engineering	B S /M S	CSU Fullerton	1991
Civil Engineering	B S	Humboldt State University	1989

Engineering Technology	B.S	CSU Long Beach	1989
Construction Management	B S	CSU Sacramento	1989
Engineering*	M S	San Francisco State University	1990
Quality Assurance	M S	San Jose State University	1989
Structural Engineering	M S	CSU San Luis Obispo	1989

Fine and Performing Arts

Textile Arts and Costume Design*	M F A.	UC Davis	1989
Music	Ph D	UC Davis	1989
Dramatic Theory and Criticism	Ph D	UC Irvine	1990-91
Art History	M A	UC Irvine	1989-90
Arts*	B F A	UC Los Angeles	1990
Dance*	M F A	UC Los Angeles	1989
Dance	Ph D	UC Los Angeles	1989-90
Design (Graphics and Space Planning)*	B F A	UC Los Angeles	1990
Ethnomusicology*	B A.	UC Los Angeles	1989
General Music History*	B A	UC Los Angeles	1989
Music (Instrumental, Vocal, and Conducting Performance)	M M /D M A	UC Los Angeles	1990
Music Theater	B A	UC Los Angeles	1990
Dance History*	Ph.D	UC Riverside	1990
Photographic Studies	M S /M F A	UC Riverside	1989
Art History/Criticism (Visual Arts)	M A /Ph D	UC San Diego	1991
Dramaturgy/Dramatic Literature	Ph D	UC San Diego	1992
Dance*	M F A	UC Santa Barbara	1989
Music	M M /D M A	UC Santa Barbara	1989
Theatre Arts*	M F A	UC Santa Cruz	1991-92
Music	B A	CSU Bakersfield	1990
Theatre Arts	B A	CSU Bakersfield	1991
Art	B F A	CSU Dominguez Hills	1993
Theatre Arts	M F A	CSU Fresno	1990
Dance	B A	CSU Fullerton	1990
Dance	B F A	CSU Long Beach	1989
Dance	M F A	CSU Long Beach	1991
Music	M M	CSU Los Angeles	1990
Art	B F A	CSU Northridge	1991
Theatre Arts	B F A	CSU Northridge	1990
Art	B F A	CSU Sacramento	1990
Art	M A	CSU San Bernardino	1990
Art*	B F A	San Diego State University	1990
Music	B A	CSU San Luis Obispo	1990
Art*	B F A	Sonoma State	1990
Art	B F A	CSU Stanislaus	1990

Foreign Languages

Italian and Special Fields*	B A	UC Los Angeles	1989
Japanese	B A	CSU Fullerton	1990
Japanese	M A	San Francisco State University	1989

Health

Health Services and Policy Analysis*	Ph D	UC Berkeley	1989

Epidemiology	M S /Ph D	UC Davis	1989
Environmental Health and Planning	Ph D	UC Irvine	1989-90
Environmental Health Sciences*	M S /Ph D	UC Los Angeles	1989
Epidemiology*	M S /Ph D	UC Los Angeles	1989
Health Services*	M S /Ph D	UC Los Angeles	1989
Physical Therapy	M S	UCSF and SF State University	1989
Communicative Disorders	Ph D	San Diego State and USC	1990
Public Health	Ph D	San Diego State University and UC San Diego	1989
Nursing	B S./M S	CSU Dominguez Hills	1989
Health Care Management	M S	CSU Dominguez Hills	1990
Physical Therapy	M P T	CSU Fresno	1989
Health Science	B S	CSU Fullerton	1990
Nursing	M S	CSU Fullerton	1992
Physical Therapy	M P T	CSU Long Beach	1989
Health Care Administration	M S	CSU Long Beach	1989
Art Therapy	M A.	CSU Los Angeles	1989
Physical Therapy	M P T	CSU Northridge	1990
Nursing*	B S	CSU Northridge	1990
Gerontology*	B A	CSU Sacramento	1989
Speech Pathology and Audiology	B S	CSU San Bernardino	1992
Public Health	M S	San Diego State University	1989
Physical Therapy	M S	San Diego State University	1990
Gerontology	M S	San Jose State University	1989
Gerontology	M S	CSU Stanislaus	1991

Home Economics

Food Science*	Ph D	UC Davis	1989
Interior Design*	B A	CSU Fresno	1989
Food and Nutritional Science*	B S	CSU Fresno	1989

Interdisciplinary

Cognitive Science*	A B	UC Berkeley	Within five years
East Asian Languages and Literatures	B A	UC Irvine	1990-91
East Asian Languages and Literatures	Ph D	UC Irvine	1990-91
Human Development	Ph D	UC Irvine	1990-91
Chinese Studies	M A	UC San Diego	1990
Cognitive Science	B A	UC San Diego	1989
International Relations and Pacific Studies	Certificate	UC San Diego	1991
Japanese Studies	B A	UC San Diego	1989
Japanese Studies	M A	UC San Diego	1992
Latin American Studies	B A /M A	UC San Diego	1990
Religious Studies	B A	UC San Diego	1990
Environmental Studies	M A	UC Santa Barbara	1989
Applied Studies	B.S	CSU Dominguez Hills	1989
Liberal Studies	M A	CSU Long Beach	1990
Asian Studies	B A /M A	CSU Los Angeles	1992
Aviation	B S	CSU Los Angeles	1990
Asian Studies	B A	CSU Sacramento	1989
Liberal Studies	M A.	CSU Sacramento	1990
Women Studies*	M A	San Francisco State University	1990

Cognitive Studies*	B A	CSU Stanislaus	1991

Letters

Celtic Studies*	A B	UC Berkeley	Indeterminate
Linguistics	Ed D/Ph D	UC Davis	1989
Classical Studies	M A	UC San Diego	1993
Applied Linguistics*	B A	UC Santa Cruz	1989
Humanities*	M A	CSU San Bernardino	1990
Creative Writing*	M F A	San Francisco State University	1990

Mathematics

Statistics	M S	UC Los Angeles	1989
Statistical Science*	B A /B S	UC Santa Barbara	1989
Statistics	Ph D	UC Santa Barbara	1990
Applied Mathematics Board of Studies*	B S /M S /Ph D	UC Santa Cruz	1989-90

Physical Sciences

Geosciences	M S /Ph D	UC Irvine	1990-91
Earth Sciences*	B A	UC Los Angeles	1989
Global Geosciences	B S	UC San Diego	1991
Marine Sciences*	Ph D	UC Santa Cruz	1990-91
Geography*	Ph D	San Diego State University and UC Santa Barbara	1990
Physical Science	B S	CSU Los Angeles	1989
Physical Science*	B S	CSU San Bernardino	1989
Geology*	B S	CSU San Bernardino	1990
Geology	B S	San Francisco State University	1989

Psychology

Health and Clinical Psychology	Ph D	UC Irvine	1990-91
Psychology*	M S.	CSU Chico	1991

Public Affairs and Services

Criminology and Legal Studies	M A /Ph D	UC Irvine	1990-91
Urban and Regional Planning	M S	UC Irvine	1989-90
Urban Studies and Planning	M A	UC San Diego	1991
Recreation Administration	B A.	Humboldt State University	1989
Sport Management*	B A.	CSU Los Angeles	1990
Social Work	M S W	CSU San Bernardino	1989
Social Work and Public Health*	M S W./M P H	San Diego State University	1989

Social Sciences

Anthropology	Ph D	UC Irvine	1991-92
Sociology	Ph D	UC Irvine	1991-92
Anthropology	M A /Ph D	UC Santa Cruz	1989
Economics	Ph D	UC Santa Cruz	1990-91

Social Science	M A	CSU San Bernardino	1989

Appendix C

Organized Research Units and Multicampus Research Units in the University of California

(This list gives Universitywide units on each campus first, followed by campus ORUs arranged by the academic units through whose Deans they report. The Date in parentheses shows the year in which the unit's establishment was approved by The Regents.)

UNIVERSITYWIDE ADMINISTRATION (MRUs)

- Agricultural Experiment Station (1874) (see also Berkeley, Davis, Riverside)
- Giannini Foundation (1928)* (see also Berkeley, Davis)
- Kearny Foundation of Soil Sciences (1951) (see also Davis)
- Water Resources Center (1957) (see also Riverside)
- Lawrence Berkeley Laboratory (1936) (see also Berkeley)
- Lawrence Livermore National Laboratory (1952)
  - Branch of the Institute of Geophysics and Planetary Physics (1982)
- Los Alamos National Scientific Laboratory (1943)
  - Branch of the Institute of Geophysics and Planetary Physics (1980)

BERKELEY (B)

Universitywide (MRUs)

- Agricultural Eperiment Station (1874) (see also UA, D, R)
  - Forest Product Laboratory (1951)
  - Giannini Foundation (1928) (see also UA, Davis)
  - Wildland Resources Center (1958)
- Lawrence Berkeley Laboratory (1936)**
  - Accelerator and Fusion Research Division (1973)
  - Center for Advanced Materials (1983)
  - Applied Sciences Division (1983)
  - Biology and Medicine Division (1941)
  - Chemical Biodynamics Division (1973)
  - Computing Division (1983)
  - Earth Sciences Division (1977)
  - Engineering Division (1984)
  - Materials and Molecular Research Division (1973)
  - Nuclear Science Division (1973)
  - Physics Division (1973)
- Institute of Transportation Studies (1974) (see also I)

Campuswide - Graduate Division (ORUs)

- Institute of Business and Economic Research (1941)
  - Center for Real Estate and Urban Economics (1962)
- Center for Studies in Higher Education (1956)
- Institute of Human Development (1927)
- Institute of Industrial Relations (1945)
- Institute of East Asian Studies (1978)
  - Center for Chinese Studies (1957)
  - Center for Japanese Studies (1958)***
  - Center for Korean Studies (1964)***
- Institute of International Studies (1955)
  - Center for Latin American Studies (1958)
  - Center for Slavic and East European Studies (1957)
  - Center for South and Southeast Asia Studies (1957)

Institute for the Study of Social Change (1969)
Space Sciences Laboratory (1960)
Survey Research Center (1958)
Institute of Urban and Regional Development (1962)

Vice Chancellor for Undergraduate Affairs

Lawrence Hall of Science (1958)

Business Administration

Center for Research in Management (1961)

Engineering

Earthquake Engineering Research Center (1967)
Electronics Research Laboratory (1967)
Engineering Systems Research Center (1961)
Sanitary Engineering and Environmental Health Research Laboratory (1949)

Environmental Design

Center for Environmental Design Research (1962)

Law

Earl Warren Legal Institute (1966)
Center for Study of Law and Society (1961)

Letters and Science

Archaeological Research Facility (1961)
Field Station for Behavioral Research (1966)
Cancer Research Laboratory (1950)
Institute of Governmental Studies (1921)
Institute of Congnitive Studies (1961)
Lowie Museum of Anthropology (1901)
Institute of Personality Assessment and Research (1949)
Center for Pure and Applied Mathematics (1966)
Laboratory of Radio Astronomy (1958)
Seismographic Stations (1887)
Museum of Vertebrate Zoology (1908)
Virus Laboratory (1948)
Theoretical Astrophysics Center (1984)

Public Health

Naval Biosciences Laboratory (1950)

DAVIS (D)

Universitywide (MRUs)

Agricultural Experiment Station (1909) (see also UA, B, R)
Giannini Foundation (1928) (see also UA, B)
Intercampus Institute for Research at Partical Accelerators (1977) (see also SD, SB)
Kearney Foundation of Soil Science (1951) (see also UA)
Institute of Marine Resources (1954) (see also SD)
Marine Food Science Group
Kearney Foundation of Soil Science (transferred from Riverside Campus, effective 7/1/85)

Campuswide (ORUs)

Agricultural and Environmental Sciences

Institute of Ecology (1966)
Center for Consumer Research (1976)
Plant Growth Laboratory (1976)
Bodega Marine Laboratory (1983)

Law

Center for Administration of Criminal Justice (1967)

Letters and Science

Agricultural History Center (1965)
Crocker Nuclear Laboratory (1965)
Institute of Governmental Affairs (1962)
Center for Geotechnical Centrifuge Modeling (1983)
Institute of Theoretical Dynamics (1985)
Center for Image Processing and Interactive Computing Research (1988)

Veterinary Medicine

California Primate Research Center (1962)
Institute for Environmental Health Research (1965)

IRVINE (I)

Universitywide (MRUs)

Humanities Research Institute (1987)
Institute of Transportation Studies (1974) (see also B)

Campuswide - (Graduate Division) (ORUs)

Developmental Biology Center (1969)
Public Policy Research Organization (1966)
Cancer Research Institute (1980)
Center for the Neurobiology of Learning and Memory (1983)
Institute for Surface and Interface Science (1987)
Critical Theory Institute (1987)

LOS ANGELES (LA)

Universitywide (MRUs)

Institute of Geophysics and Planetary Physics (1946) (see also R, SD)
White Mountain Research Station (1950)

Campuswide (ORUs)

Institute of American Cultures (1972)
Afro-American Studies Center (1961)
American Indian Studies Center (1971)
Asian-American Studies Center (1969)
Chicano Studies Center (1969)
Institute of Industrial Relations (1945)
Laboratory of Biomedical and Environmental Sciences (1947)
Molecular Biology Institute (1963)
Plasma and Fusion Research Institute

Dentistry

Dental Research Institute (1966)

Campuswide (ORUs)

Letters and Science

Center for African Studies (1958)
Institute of Archaeology (1973)
Center for the Study of Comparative Folklore and Mythology (1960)
Center for Latin American Studies (1958)

Center for Medieval and Renaissance Studies (1962)
Center for Near Eastern Studies (1957)
Center for Russian and East European Studies (1958)
Institute for Social Science Research (1947)
Center for the Study of Women (1984)
Center for Seventeenth and Eighteenth Century Studies (1985)

Medicine

Brain Research Institute (1959)
Jules Stein Eye Institute (1961)
Mental Retardation Research Center (1974)
Crump Institute for Medical Engineering (1976)

RIVERSIDE (R)

Universitywide (MRUs)

Citrus Research Center and Agricultural Experiment Station (1907) (see also UA, B, D)
Institute of Geophysics and Planetary Physics (1967) (see also LA, SD)
Statewide Air Pollution Research Center (1961)
Water Resources Center (1957) (see also UA)

Campuswide (ORUs)

Dry Lands Research Institute (1963)
Center for Social and Behavioral Science Research (1970)

SAN DIEGO (SD)

Universitywide (MRUs)

California Space Institute (1980)
Institute of Geophysics and Planetary Physics (1946) (see also LA, R)
Institute of Marine Resources (1954) (see also D)
Center for Marine Affairs
Food Chain Research Group
California Sea Grant College Program
Marine Natural Products Group
Nearshore Research Group
Phytoplankton Resources Group
Intercampus Institute for Research at Partical Accelerators (1977) (see also D, SB)
Institute on Global Conflict and Cooperation (1985)

Campuswide (ORUs)

Center for Astrophsics and Space Sciences (1979)
Center for Molecular Genetics (1974)
Center for Energy and Combustion Research (1974)
Center for Human Information Processing (1967)
Center for Iberian and Latin American Studies (1975)
Institute of Nonlinear Science (1986)
Institute for Cognitive Science (1967)
Center for Research in Language Acquisition (1969)
Center for Music Experiment and Related Research (1973)
Institute for Pure and Applied Physical Sciences (1967)
Laboratory for Mathematics and Statistics (1982)
Center for United States-Mexican Studies (1983)
Center for Magnetic Recording Research (1988)

Scripps Institution of Oceanography (1912)

Center for Coastal Studies
Geological Research Division
Marine Biology Research Division
Marine Life Research Group
Marine Physical Laboratory
Ocean Research Division
Physiological Research Laboratory
Ship Operations and Technical Support Division

School of Medicine

Cancer Center (1979)
Institute for Research on Aging (1983)

SAN FRANCISCO (SF)

Campuswide (ORUs)

Francis I. Proctor Foundation for Research in Ophthalmology (1947)

Medicine

Cancer Research Institute (1948)
Cardiovascular Research Institute (1958)
Hooper Foundation (1913)
Hormone Research Laboratory (1950)
Institute for Health Policy Studies (1981)
Metabolic Unit for Research in Arthritis and Allied Diseases (1950)
Laboratory of Radiobiology and Environmetal Health (1949)
Reproductive Endocrinology Center (1977)

Nursing

Institute for Research in Health and Aging (1985)

SANTA BARBARA

Universitywide (MRUs)

Intercampus Institute for Research at Particle Accelerators (1977) (see also D, SD)

Campuswide (ORUs)

Center for Chicano Studies (1969)
Community and Organization Research Institute (1967)
Computer Systems Laboratory (1972)
Institute of Environmental Stress (1964)
Institute for Crustal Studies (1987)
Institute for Interdisciplinary Application of Algebra and Combinatorics (1973)
Institute for Polymers and Organic Solids (1983)
Marine Science Institute (1969)
Quantum Institute (1969)
Social Process Research Institute (1975)

SANTA CRUZ (SC)

Universitywide (MRUs)

University of California Observatories (1888)

Campuswide (ORUs)

Center for Nonlinear Science (1987)
Institute for Marine Sciences (1976)
Institute for Particle Physics (1980)
Institute of Tectonics (1986)

* Transferred to Universitywide Administration - 1975.
** Not a Berkeley ORU; listed here for reference only.
*** The Center for Japanese and Korean Studies was divided, effective July 1, 1979, into two separate centers

Appendix D *Sample Review Questions*

Note The following material is reproduced from pages 3-5 of Attachment A to Item 3 of the Trustees Agenda on Educational Policy for March 7-8, 1989

Sample Questions from Program Review Documents of Selected Campuses

1. What constitutes an excellent program in your discipline? How does your program compare to it? What changes would you make in your program, resources permitting, to make it more closely resemble the program you have envisioned?

2. How do the objectives, admission and degree requirements, and the size and structure of your majors or credential programs compare with those of your counterparts at other universities? How does the curriculum compare in breadth with leading programs in other CSU institutions? In leading national institutions in the field?

3. Are there developments in the body of knowledge born of or crucial to your discipline that are currently not represented in your program? Should they be represented in order to maintain or improve the quality of your program? If so, what changes would have to be made in your current program in incorporate these developments?

4. How are career and academic advising provided for your students? Specify how faculty and/or peers are trained to advise students.

5. Are departmental grading practices reasonable and reliable? Indicate how the grade point average for undergraduate and graduate student differs from those of University and school norms. If applicable, explain the factors which may account for the difference. (Note: most reviews contain data on grading.)

6. For each student constituency served by the department, describe retention patterns, changes in these, and steps taken to address attrition, where applicable.

7. Describe policies and procedures for recognizing outstanding achievement and contributions by students.

8. Based on a summary of the present number and distribution of full- and part-time faculty by rank, sex and ethnicity, what changes in faculty composition would best serve the academic program and the students enrolled in it?

9. Do physical facilities, equipment, library and other support serve the needs of the academic program and the students enrolled in it? If not, what is needed to bring the program to acceptable levels.

10. How has the department/program determined the characteristics, needs and desires of its students, and how is such information reflected in current policies, scheduling, curriculum planning, advising, and services for students?

11 How is the department planning for the next five years and the next generation of students?

12. Is the current enrollment in the program sufficient to permit the academic unit to schedule all graduate courses regularly and to maintain the options and specializations in the program? If the enrollment is barely sufficient or insufficient, are there other compelling reasons for retaining the program?

13. Does your program have areas of special strength or concentration in its curriculum? Does it de-emphasize certain specialized subfields or areas?

14. Does the program employ the full range of instructional methods and modes appropriate to its task?

Finally, typical of questions directed to external reviewers are these:

— Would you tend to support a graduate of this program for admission to a professional or a Ph.D. program at your institution based on your knowledge of the department?

— Did your preconceptions of the program differ substantially from your estimation of the program now?

— What changes do you think would most improve the program that could be undertaken by the department without budgetary increases?

— Which changes would require substantial assistance from the School and University administration?

References

Arns, Robert G , and Poland, William "Changing the University Through Program Review " *Journal of Higher Education*, 51 3 (May/June 1980) 268-84

Barak, Robert J "Program Evaluation as a Tool for Retrenchment," in James R Mingle (Ed), *Challenges of Retrenchment Strategies for Consolidating Programs, Cutting Costs, and Reallocating Resources* San Francisco Jossey-Bass, 1981, pp 212-225

-- *Program Review in Higher Education Within and Without* Boulder, Colorado National Center for Higher Education Management Systems, 1982

-- "A Perspective on the Antecedents, Present Status, and Future Developments of Academic Program Review in Higher Education " Paper presented at the Annual Meeting of the Association for the Study of Higher Education, San Antonio, Texas, February 20-23, 1986

Barak, Robert J , and Berdahl, Robert O "State-Level Academic Program Review in Higher Education " Education Commission of the States Report No 7 Denver, Colorado The Commission, 1978

Bogue, E Grady "State Agency Approaches to Academic Program Evaluation," in Eugene C Craven (Ed), *Academic Program Evaluation New Directions for Institutional Research 27* San Francisco Jossey-Bass, 1980, pp 69-88

Bowen, Frank M , and Glenny, Lyman A *Quality and Accountability An Evaluation of Statewide Program Review Procedures* Sacramento California Postsecondary Education Commission, 1981

Braskamp, Larry A "Evaluation Systems Are More Than Information Systems," in Richard F Wilson (Ed), *Designing Academic Program Reviews New Directions for Higher Education 37* San Francisco Jossey-Bass, 1982, pp 55-66

Callan, Patrick "The Challenge to Program Reviewers " Report of a WICHE-NCHEMS Workshop and Study No date

Clark, Mary Jo "Academic Program Evaluation," in N P Uhl (Ed), *Using Research for Strategic Planning New Directions for Institutional Research 37* San Francisco Jossey-Bass, 1983, pp 27-38

Clifford, David L , and Sherman, Paul "Internal Evaluation Integrating Program Evaluation and Management," in Arnold J Love (Ed), *Developing Effective Internal Evaluation New Directions for Program Evaluation 20* San Francisco Jossey-Bass, 1983, pp 23-45

Conrad, Clifton F , and Wilson, Richard F "Academic Program Reviews Institutional Approaches, Expectations, and Controversies " *ASHE-ERIC Higher Education Report* No 5, 1985 Washington, D C American Association for Higher Education, 1985

Craven, Eugene C (Ed) *Academic Program Evaluation New Directions for Institutional Research 27* San Francisco Jossey-Bass, 1980

Education Commission of the States "Challenge Coordination and Governance in the 80's A Report on Issues and Directions in Statewide Coordination and Governance of Postsecondary Education in the 1980's " *Education Commission of the States Report 134* Denver, Colorado The Commission, 1980

Feasley, Charles E "Program Evaluation " *ASHE-ERIC Higher Education Report* No 2, 1980 Wash-

ington, D C American Association for Higher Education, 1980

Hartmark, Leif S "A Planning, Budgeting, and Evaluation System Lessons from Experience" Paper presented at the Third Annual Conference on Higher Education Finance, University of Arizona, 1982

Jellema, William W "The Legacy of Rip van Winkle," in D W Steeples (Ed), *Institutional Revival Case Histories New Directions for Higher Education 54* San Francisco Jossey-Bass, 1986, pp 5-14

Miller, Richard I , and Barak, Robert J "Rating Undergraduate Program Review at the State Level" *Educational Record*, 67 2-3 (Spring/Summer 1986) 42-46

Mingle, James R "Effective Coordination of Higher Education What Is It? Why Is It So Difficult to Achieve?" *Issues in Higher Education* 23 Atlanta, Georgia Southern Regional Education Board, 1988

Patton, Michael Q *Utilization-Focused Evaluation.* Beverly Hills Sage, 1978

Seymour, Daniel T *"Developing Academic Programs The Climate for Innovation" ASHE-ERIC Higher Education Report* No 3, 1988 Washington, D C American Association for Higher Education, 1988

Smith, Donald K. "Multi-Campus System Approaches to Academic Program Evaluation," in Eugene C Craven (Ed), *Academic Program Evaluation New Directions for Institutional Research 27* San Francisco Jossey-Bass, 1980, pp 43-68

Smith Tim R , Drabenstott, Mark, and Gibson, Lynn "The Role of Universities in Economic Development," *Economic Review*, 1980 3-21

Stufflebeam, D L , et al *Educational Evaluation and Decision Making* Itasca, Illinois Peacock, 1971

University of California *Handbook for Coordinating Committee on Graduate Affairs* Berkeley Office of the President, 1985

Weiss, Carol H *Evaluation Research Methods of Assessing Program Effectiveness* Englewood Cliffs, New Jersey Prentice-Hall, 1972

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

THE California Postsecondary Education Commission is a citizen board established in 1974 by the Legislature and Governor to coordinate the efforts of California's colleges and universities and to provide independent, non-partisan policy analysis and recommendations to the Governor and Legislature

Members of the Commission

The Commission consists of 15 members Nine represent the general public, with three each appointed for six-year terms by the Governor, the Senate Rules Committee, and the Speaker of the Assembly The other six represent the major segments of postsecondary education in California

As of January 1991, the Commissioners representing the general public are

Mim Andelson, Los Angeles,

C. Thomas Dean, Long Beach,

Henry Der, San Francisco, *Vice Chair,*

Rosalind K Goddard, Los Angeles,

Helen Z Hansen, Long Beach,

Lowell J Paige, El Macero, *Chair,*

Dale F Shimasaki, Sacramento

Stephen P Teale, M D , Modesto

Representatives of the segments are

Meredith J Khachigian, San Clemente, appointed by the Regents of the University of California,

Theodore J Saenger, San Francisco, appointed by the Trustees of the California State University,

John F Parkhurst, Folsom, appointed by the Board of Governors of the California Community Colleges,

Harry Wugalter, Thousand Oaks, appointed by the Council for Private Postsecondary and Vocational Education,

Joseph D Carrabino, Orange, appointed by the California State Board of Education, and

James B Jamieson, San Luis Obispo, appointed by the Governor from nominees proposed by California's independent colleges and universities

Functions of the Commission

The Commission is charged by the Legislature and Governor to "assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs "

To this end, the Commission conducts independent reviews of matters affecting the 2,600 institutions of postsecondary education in California, including community colleges, four-year colleges, universities, and professional and occupational schools

As an advisory planning and coordinating body, the Commission does not administer or govern any institutions, nor does it approve, authorize, or accredit any of them Instead, it cooperates with other State agencies and non-governmental groups that perform these functions, while operating as an independent board with its own staff and its own specific duties of evaluation, coordination, and planning,

Operation of the Commission

The Commission holds regular meetings throughout the year at which it debates and takes action on staff studies and takes positions on proposed legislation affecting education beyond the high school in California By law, its meetings are open to the public Requests to speak at a meeting may be made by writing the Commission in advance or by submitting a request before the start of the meeting

The Commission's day-to-day work is carried out by its staff in Sacramento, under the guidance of its executive director, Kenneth B O'Brien, who is appointed by the Commission

The Commission publishes and distributes without charge some 30 to 40 reports each year on major issues confronting California postsecondary education Recent reports are listed on the back cover

Further information about the Commission, its meetings, its staff, and its publications may be obtained from the Commission offices at 1020 Twelfth Street, Third Floor, Sacramento, CA 98514-3985, telephone (916) 445-7933

OVERSEEING THE HEART OF THE ENTERPRISE: The Commission's Thirteenth Annual Report on Program Projection, Approval, and Review Activities

California Postsecondary Education Commission Report 89-25

ONE of a series of reports published by the Commission as part of its planning and coordinating responsibilities Additional copies may be obtained without charge from the Publications Office, California Postsecondary Education Commission, Third Floor, 1020 Twelfth Street, Sacramento, California 95814-3985

Recent reports of the Commission include

89-10 Out of the Shadows -- The IRCA/SLIAG Opportunity. A Needs Assessment of Educational Services for Eligible Legalized Aliens in California Under the State Legalization Impact Assistance Grant Program of the Immigration Reform and Control Act of 1986, submitted to the California Postsecondary Education Commission, February 23, 1989, by California Tomorrow (March 1989)

89-11 Faculty Salaries in California's Public Universities, 1989-90 A Report to the Legislature and Governor in Response to Senate Concurrent Resolution No 51 (1965) (March 1989)

89-12 Teacher Preparation Programs Offered by California's Public Universities A Report to the Legislature in Response to Supplemental Language in the 1988 State Budget Act (March 1989)

89-13 The State's Reliance on Non-Governmental Accreditation A Report to the Legislature in Response to Assembly Concurrent Resolution 78 (Resolution Chapter 22, 1988) (March 1989)

89-14 Analysis of the Governor's Proposed 1989-90 Budget A Staff Report to the California Postsecondary Education Commission (March 1989)

89-15 Planning Our Future. A Staff Background Paper on Long-Range Enrollment and Facilities Planning in California Public Higher Education (April 1989)

89-16 Standardized Tests Used for Higher Education Admission and Placement in California During 1988 The Fourth in a Series of Annual Reports Published in Accordance with Senate Bill 1758 (Chapter 1505, Statutes of 1984) (April 1989)

89-17 Protecting the Integrity of California Degrees The Role of California's Private Postsecondary Education Act of 1977 in Educational Quality Control (April 1989)

89-18 Recommendations for Revising the Private Postsecondary Education Act of 1977 A Report to the Legislature and Governor on Needed Improvements in State Oversight of Privately Supported Postsecondary Education (April 1989)

89-19 Mandatory Statewide Student Fees in California's Public Four-Year Colleges and Universities Report of the Sunset Review Committee on Statewide Student Fee Policy Under Senate Bill 195 (1985), published for the Committee by the California Postsecondary Education Commission (April 1989)

89-20 State Policy Guidelines for Adjusting Nonresident Tuition at California's Public Colleges and Universities Report of the Advisory Committee on Nonresident Tuition Policies Under Senate Concurrent Resolution 69, published for the Committee by the California Postsecondary Education Commission (June 1989)

89-21 State Oversight of Postsecondary Education Three Reports on California's Licensure of Private Institutions and Reliance on Non-Governmental Accreditation [A reprint of Reports 89-13, 89-17, and 89-18] (June 1989)

89-22 Revisions to the Commission's Faculty Salary Methodology for the California State University (June 1989)

89-23 Update of Community College Transfer Student Statistics, 1988-89 The University of California, The California State University, and California's Independent Colleges and Universities (August 1989)

89-24 California College-Going Rates, Fall 1988 Update The Twelfth in a Series of Reports on New Freshman Enrollments at California's Colleges and Universities by Recent Graduates of California High Schools (September 1989)

89-25 Overseeing the Heart of the Enterprise The Commission's Thirteenth Annual Report on Program Projection, Approval, and Review Activities, 1987-88 (September 1989)

89-26 Supplemental Report on Academic Salaries, 1988-89 A Report to the Governor and Legislature in Response to Senate Concurrent Resolution No 51 (1965) and Subsequent Postsecondary Salary Legislation (September 1989)

89-27 Technology and the Future of Education Directions for Progress A Report of the California Postsecondary Education Commission's Policy Task Force on Educational Technology (September 1989)